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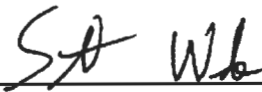
**2023 40 C.F.R. § 257 ANNUAL
GROUNDWATER MONITORING AND
CORRECTIVE ACTION REPORT
BOTTOM ASH BASIN
DUCK CREEK POWER PLANT
CANTON, ILLINOIS
CCR UNIT 205**

**2023 40 C.F.R. § 257 ANNUAL GROUNDWATER
MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT BOTTOM ASH BASIN**

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CONTENTS

EXECUTIVE SUMMARY	4
1. Introduction	5
2. Monitoring and Corrective Action Program Status	7
3. Key Actions Completed in 2023	8
4. Problems Encountered and Actions to Resolve the Problems	10
5. Key Activities Planned for 2024	11
6. References	12

TABLES (IN TEXT)

Table A 2023 Assessment Monitoring Program Summary

TABLES (ATTACHED)

Table 1 Groundwater Elevations
Table 2 Analytical Results - Appendix III Parameters
Table 3 Statistical Background Values

FIGURES (ATTACHED)

Figure 1 Monitoring Well Location Map
Figure 2 Potentiometric Surface Map, January 9, 2023
Figure 3 Potentiometric Surface Map, May 8, 2023
Figure 4 Potentiometric Surface Map, July 17, 2023
Figure 5 Potentiometric Surface Map, October 16, 2023

APPENDICES

Appendix A Laboratory Reports
Appendix B Statistical Methodology for Determination of Background Values

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
ASD	Alternative Source Demonstration
BAB	Bottom Ash Basin
CCR	coal combustion residuals
D12	Quarter 1, 2023 Detection Monitoring sampling event
D12R	Quarter 2, 2023 Detection Monitoring sampling event
D13	Quarter 3, 2023 Detection Monitoring sampling event
D13R	Quarter 4, 2023 Detection Monitoring sampling event
DCPP	Duck Creek Power Plant
GWPS	groundwater protection standard
IEPA	Illinois Environmental Protection Agency
NA	not applicable
Ramboll	Ramboll Americas Engineering Solutions, Inc.
SAP	Sampling and Analysis Plan
SSI	statistically significant increase
TBD	to be determined

EXECUTIVE SUMMARY

This report has been prepared to provide the information required by Title 40 of the Code of Federal Regulations (40 C.F.R.) Section (§) 257.90(e) for the Bottom Ash Basin (BAB) located at the Duck Creek Power Plant (DCPP) near Canton, Illinois.

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

As discussed in **Section 3** of this annual report, the monitoring system was updated in 2023 to use the same monitoring system developed for compliance with Title 35 of the Illinois Administrative Code (35 I.A.C.) § 845, which was submitted to the Illinois Environmental Protection Agency (IEPA) via an operating permit application.

No Statistically Significant Increases (SSIs) of 40 C.F.R. § 257 Appendix III parameter concentrations greater than background concentrations were reported in 2023. The BAB remains in the Detection 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 BAB located at the DCPD near Canton, 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 3**).
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 [GWPS] for one or more constituents listed in Appendix IV of §257 pursuant to §257.95(g) include all of the following:
 - A. Identify those constituents listed in Appendix IV of §257 and the names of the monitoring wells associated with such an increase.
 - B. Provide the date when the assessment of corrective measures was initiated for the CCR unit.
 - C. Provide the date when the public meeting was held for the assessment of corrective measures for the CCR unit.
 - D. Provide the date when the assessment of corrective measures was completed for the CCR unit.
- v. Whether a remedy was selected pursuant to §257.97 during the current annual reporting period, and if so, the date of remedy selection.
- vi. Whether remedial activities were initiated or are ongoing pursuant to § 257.98 during the current annual reporting period.

This report provides the required information for the BAB for calendar year 2023.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

No changes have occurred to the monitoring program status in calendar year 2023 and the BAB remains in the Detection Monitoring Program in accordance with 40 C.F.R. § 257.94.

3. KEY ACTIONS COMPLETED IN 2023

A summary of the samples collected from background and compliance monitoring wells in 2023 under the Detection 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. Beginning in 2023, the monitoring system was updated to be consistent with that proposed for compliance with 35 I.A.C. § 845, which includes all monitoring wells used in the 2022 40 C.F.R. § 257 monitoring system (Ramboll, 2022a). No wells were installed or decommissioned in 2023 (the wells added from the 35 I.A.C. § 845 monitoring system were installed prior to 2023).

One groundwater sample was collected from each background and compliance well during each monitoring event¹. The AP is also regulated under 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 2023 are included in this report. All samples were collected and analyzed in accordance with the Multi-Site Sampling and Analysis Plan (SAP) (Ramboll, 2023). All data collected for the 40 C.F.R. § 257 monitoring program and 40 C.F.R. § 257 Appendix III parameters that were analyzed under the 35 I.A.C. § 845 program were compared to background concentrations in accordance with 40 C.F.R. § 257.94(e)(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 40 C.F.R. § 257 Appendix III parameters that were analyzed under the 35 I.A.C. § 845 program in 2023 are presented in **Tables 1 and 2**. 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, 2022b), the Multi-Site Quality Assurance Project Plan (Ramboll, 2022c), and the Multi-Site Data Management Plan (Ramboll, 2022d) to determine any SSIs of Appendix III parameters greater than background values. SSIs are summarized in **Table A** and highlighted in **Table 2**. Statistical background values are provided in **Table 3**. A flow chart showing the statistical methodology for determination of background values is included as **Appendix B**.

No SSIs were reported in 2023 and the BAB remains in the Detection Monitoring Program.

¹Monitoring well BA02L had insufficient water for purging; therefore, a groundwater sample was not collected during D13 sampling event.

Table A. 2023 Detection Monitoring Program Summary

Event ID	Sampling Dates ^{1, 2, 3}	Analytical Data Receipt Date ⁴	SSI(s) Determination Date	SSI(s)	ASD Completion Date
D12	January 10, 2023	February 15, 2023	May 16, 2023	None	NA
D12R	May 10 – May 15, 2023	June 13, 2023	NA	NA	NA
D13	July 24 – September 6, 2023	October 21, 2023	January 19, 2024	pH at wells BA01, BA02, and BA03L	TBD
D13R	October 18 - 19, 2023	January 19, 2024	NA	NA	NA

Notes:

ASD: Alternative Source Demonstration

NA: not applicable

SSI: Statistically Significant Increase

TBD: to be determined in 2024

¹ All samples were analyzed for Appendix III parameters listed in 40 C.F.R. § 257.94(e)

² The following background wells were sampled for each event: BA05 and BA06

³ The following compliance wells were sampled for each event: BA01, BA02, BA02L, BA03, BA03L, and BA04

⁴ All data collected for the 40 C.F.R. § 257 monitoring program and Appendix III parameters that were analyzed under the 35 I.A.C. § 845 program were included for background calculations in accordance with 40 C.F.R. § 257.94(e)(1).

4. PROBLEMS ENCOUNTERED AND ACTIONS TO RESOLVE THE PROBLEMS

No problems were encountered with the groundwater monitoring program during 2023. Groundwater samples were collected and analyzed in accordance with the SAP and all data were accepted.

5. KEY ACTIVITIES PLANNED FOR 2024

The following key activities are planned for 2024:

- Continuation of the Detection Monitoring Program with semiannual sampling scheduled for the first and third quarters of 2024 (and sampling for 35 I.A.C. § 845 scheduled for the second and fourth quarters).
- Complete evaluation of analytical data from the compliance wells using background data to determine whether an SSI of Appendix III parameters detected at concentrations greater than background concentrations has occurred.
- If an SSI is identified, potential alternate sources (*i.e.*, a source other than the CCR unit caused the SSI or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality) will be evaluated.
 - If an alternate source is identified to be the cause of the SSI, a written demonstration will be completed within 90 days of SSI determination and included in the 2024 Annual Groundwater Monitoring and Corrective Action Report.
 - If an alternate source(s) is not identified to be the cause of the SSI, the applicable requirements of 40 C.F.R. §§ 257.94 through 257.98 as may apply in 2024 (*e.g.*, Assessment Monitoring) 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. 40 C.F.R. § 257 Groundwater Monitoring Plan, the Bottom Ash Basin, Duck Creek Power Plant, Canton, Illinois. December 28, 2022.

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

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

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2022d. 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
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT
BOTTOM ASH BASIN
CANTON, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
BA01	Compliance	UA	01/09/2023	16.42	570.67
BA01	Compliance	UA	04/08/2023	14.46	572.63
BA01	Compliance	UA	05/08/2023	14.89	572.20
BA01	Compliance	UA	06/17/2023	16.91	570.17
BA01	Compliance	UA	07/17/2023	14.99	572.09
BA01	Compliance	UA	08/16/2023	14.22	572.87
BA01	Compliance	UA	09/16/2023	15.63	571.46
BA01	Compliance	UA	10/16/2023	16.25	570.84
BA01	Compliance	UA	11/20/2023	16.08	571.01
BA01	Compliance	UA	12/04/2023	15.54	571.55
BA02	Compliance	UA	01/09/2023	11.59	568.33
BA02	Compliance	UA	05/15/2023	[8.39]	[571.53]
BA02	Compliance	UA	07/25/2023	[12.02]	[567.90]
BA02	Compliance	UA	10/16/2023	13.03	566.89
BA02	Compliance	UA	11/20/2023	12.23	567.69
BA02	Compliance	UA	12/04/2023	11.89	568.03
BA02L	Compliance	UA/PMP	01/09/2023	11.47	568.44
BA02L	Compliance	UA/PMP	04/08/2023	10.93	568.97
BA02L	Compliance	UA/PMP	05/08/2023	11.49	568.41
BA02L	Compliance	UA/PMP	06/17/2023	11.06	568.84
BA02L	Compliance	UA/PMP	07/17/2023	11.06	568.84
BA02L	Compliance	UA/PMP	09/06/2023	[10.95]	[568.96]
BA02L	Compliance	UA/PMP	10/18/2023	11.31	568.60
BA02L	Compliance	UA/PMP	11/20/2023	Dry	Dry
BA02L	Compliance	UA/PMP	12/04/2023	Dry	Dry
BA03	Compliance	UA	01/09/2023	6.92	571.42
BA03	Compliance	UA	04/08/2023	5.25	573.08
BA03	Compliance	UA	05/08/2023	5.95	572.39
BA03	Compliance	UA	07/24/2023	[10.48]	[567.86]
BA03	Compliance	UA	08/16/2023	8.53	569.81
BA03	Compliance	UA	10/16/2023	11.06	567.28
BA03	Compliance	UA	11/20/2023	9.48	568.86
BA03	Compliance	UA	12/04/2023	7.35	570.99
BA03L	Compliance	UA/PMP	01/09/2023	6.52	571.23
BA03L	Compliance	UA/PMP	04/08/2023	4.60	573.15
BA03L	Compliance	UA/PMP	05/08/2023	5.03	572.72
BA03L	Compliance	UA/PMP	06/17/2023	9.34	568.40
BA03L	Compliance	UA/PMP	07/17/2023	8.87	568.87
BA03L	Compliance	UA/PMP	08/16/2023	9.64	568.10
BA03L	Compliance	UA/PMP	09/06/2023	[9.46]	[568.29]
BA03L	Compliance	UA/PMP	09/16/2023	10.85	566.90
BA03L	Compliance	UA/PMP	10/16/2023	10.85	566.90
BA03L	Compliance	UA/PMP	11/20/2023	9.19	568.56
BA03L	Compliance	UA/PMP	12/04/2023	6.95	570.80
BA04	Compliance	UA	01/09/2023	7.93	570.26
BA04	Compliance	UA	04/08/2023	5.40	572.79

TABLE 1
GROUNDWATER ELEVATION DATA
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT
BOTTOM ASH BASIN
CANTON, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
BA04	Compliance	UA	05/08/2023	5.49	572.70
BA04	Compliance	UA	07/24/2023	[6.99]	[571.20]
BA04	Compliance	UA	10/16/2023	7.75	570.44
BA04	Compliance	UA	11/20/2023	7.40	570.79
BA04	Compliance	UA	12/04/2023	7.30	570.89
BA05	Background	UA	01/09/2023	22.15	573.57
BA05	Background	UA	04/08/2023	17.71	578.00
BA05	Background	UA	05/08/2023	18.53	577.18
BA05	Background	UA	06/17/2023	22.50	573.22
BA05	Background	UA	07/17/2023	21.09	574.63
BA05	Background	UA	08/16/2023	20.22	575.50
BA05	Background	UA	09/16/2023	21.93	573.79
BA05	Background	UA	10/16/2023	22.89	572.83
BA05	Background	UA	11/20/2023	21.49	574.23
BA05	Background	UA	12/04/2023	20.61	575.11
BA06	Background	UA	01/09/2023	28.19	567.44
BA06	Background	UA	04/08/2023	20.99	574.64
BA06	Background	UA	05/08/2023	21.46	574.17
BA06	Background	UA	06/17/2023	26.66	568.97
BA06	Background	UA	07/17/2023	24.89	570.74
BA06	Background	UA	08/16/2023	22.00	573.63
BA06	Background	UA	09/16/2023	23.52	572.11
BA06	Background	UA	10/16/2023	24.70	570.93
BA06	Background	UA	11/20/2023	24.38	571.25
BA06	Background	UA	12/04/2023	22.62	573.01

Notes:
Only wells with groundwater elevations measured are included.
BMP = below measuring point
Bracketing [] indicates that the measurement was obtained outside of the episodic depth to groundwater measurements time frame.
NAVD88 = North American Vertical Datum of 1988
Monitored Unit Abbreviations:
 UA = uppermost aquifer
 UA/PMP = uppermost aquifer/potential migration pathway

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT
BOTTOM ASH BASIN
CANTON, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Background	SSI Type
BA05	UA	Background	01/10/2023	D12	Boron, total	mg/L	0.110	NA	NA
BA05	UA	Background	05/12/2023	D12R	Boron, total	mg/L	0.100 J+	NA	NA
BA05	UA	Background	07/24/2023	D13	Boron, total	mg/L	0.120 J+	NA	NA
BA05	UA	Background	10/19/2023	D13R	Boron, total	mg/L	0.0810	NA	NA
BA05	UA	Background	01/10/2023	D12	Calcium, total	mg/L	200	NA	NA
BA05	UA	Background	05/12/2023	D12R	Calcium, total	mg/L	210	NA	NA
BA05	UA	Background	07/24/2023	D13	Calcium, total	mg/L	180	NA	NA
BA05	UA	Background	10/19/2023	D13R	Calcium, total	mg/L	200	NA	NA
BA05	UA	Background	01/10/2023	D12	Chloride, total	mg/L	9.30	NA	NA
BA05	UA	Background	05/12/2023	D12R	Chloride, total	mg/L	8.20	NA	NA
BA05	UA	Background	07/24/2023	D13	Chloride, total	mg/L	9.60	NA	NA
BA05	UA	Background	10/19/2023	D13R	Chloride, total	mg/L	8.30	NA	NA
BA05	UA	Background	01/10/2023	D12	Fluoride, total	mg/L	0.260	NA	NA
BA05	UA	Background	05/12/2023	D12R	Fluoride, total	mg/L	0.228 J	NA	NA
BA05	UA	Background	07/24/2023	D13	Fluoride, total	mg/L	0.25 UJ	NA	NA
BA05	UA	Background	10/19/2023	D13R	Fluoride, total	mg/L	0.194	NA	NA
BA05	UA	Background	01/10/2023	D12	pH (field)	SU	7.1	NA	NA
BA05	UA	Background	05/12/2023	D12R	pH (field)	SU	7.0	NA	NA
BA05	UA	Background	07/24/2023	D13	pH (field)	SU	6.8	NA	NA
BA05	UA	Background	10/19/2023	D13R	pH (field)	SU	6.8	NA	NA
BA05	UA	Background	01/10/2023	D12	Sulfate, total	mg/L	460	NA	NA
BA05	UA	Background	05/12/2023	D12R	Sulfate, total	mg/L	500	NA	NA
BA05	UA	Background	07/24/2023	D13	Sulfate, total	mg/L	500	NA	NA
BA05	UA	Background	10/19/2023	D13R	Sulfate, total	mg/L	480	NA	NA
BA05	UA	Background	01/10/2023	D12	Total Dissolved Solids	mg/L	1,200	NA	NA
BA05	UA	Background	05/12/2023	D12R	Total Dissolved Solids	mg/L	1,200	NA	NA
BA05	UA	Background	07/24/2023	D13	Total Dissolved Solids	mg/L	1,200	NA	NA
BA05	UA	Background	10/19/2023	D13R	Total Dissolved Solids	mg/L	1,200	NA	NA
BA06	UA	Background	01/10/2023	D12	Boron, total	mg/L	7.30	NA	NA
BA06	UA	Background	05/12/2023	D12R	Boron, total	mg/L	8.70	NA	NA
BA06	UA	Background	07/24/2023	D13	Boron, total	mg/L	9.00	NA	NA
BA06	UA	Background	10/19/2023	D13R	Boron, total	mg/L	9.90	NA	NA
BA06	UA	Background	01/10/2023	D12	Calcium, total	mg/L	300	NA	NA
BA06	UA	Background	05/12/2023	D12R	Calcium, total	mg/L	340	NA	NA
BA06	UA	Background	07/24/2023	D13	Calcium, total	mg/L	280	NA	NA
BA06	UA	Background	10/19/2023	D13R	Calcium, total	mg/L	300	NA	NA
BA06	UA	Background	01/10/2023	D12	Chloride, total	mg/L	590	NA	NA
BA06	UA	Background	05/12/2023	D12R	Chloride, total	mg/L	510	NA	NA
BA06	UA	Background	07/24/2023	D13	Chloride, total	mg/L	560	NA	NA
BA06	UA	Background	10/19/2023	D13R	Chloride, total	mg/L	510	NA	NA
BA06	UA	Background	01/10/2023	D12	Fluoride, total	mg/L	0.258	NA	NA
BA06	UA	Background	05/12/2023	D12R	Fluoride, total	mg/L	0.231 J	NA	NA
BA06	UA	Background	07/24/2023	D13	Fluoride, total	mg/L	0.264 J+	NA	NA
BA06	UA	Background	10/19/2023	D13R	Fluoride, total	mg/L	0.231	NA	NA
BA06	UA	Background	01/10/2023	D12	pH (field)	SU	6.7	NA	NA
BA06	UA	Background	05/12/2023	D12R	pH (field)	SU	6.4	NA	NA

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT
BOTTOM ASH BASIN
CANTON, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Background	SSI Type
BA06	UA	Background	07/24/2023	D13	pH (field)	SU	6.5	NA	NA
BA06	UA	Background	10/19/2023	D13R	pH (field)	SU	6.6	NA	NA
BA06	UA	Background	01/10/2023	D12	Sulfate, total	mg/L	300	NA	NA
BA06	UA	Background	05/12/2023	D12R	Sulfate, total	mg/L	340	NA	NA
BA06	UA	Background	07/24/2023	D13	Sulfate, total	mg/L	360	NA	NA
BA06	UA	Background	10/19/2023	D13R	Sulfate, total	mg/L	370	NA	NA
BA06	UA	Background	01/10/2023	D12	Total Dissolved Solids	mg/L	2,100	NA	NA
BA06	UA	Background	05/12/2023	D12R	Total Dissolved Solids	mg/L	2,200	NA	NA
BA06	UA	Background	07/24/2023	D13	Total Dissolved Solids	mg/L	2,300	NA	NA
BA06	UA	Background	10/19/2023	D13R	Total Dissolved Solids	mg/L	2,000	NA	NA
BA01	UA	Compliance	01/10/2023	D12	Boron, total	mg/L	0.0240	3.90	No Exceedance
BA01	UA	Compliance	05/11/2023	D12R	Boron, total	mg/L	0.0230 J+	3.90	No Exceedance
BA01	UA	Compliance	07/24/2023	D13	Boron, total	mg/L	0.0720 J+	3.90	No Exceedance
BA01	UA	Compliance	10/18/2023	D13R	Boron, total	mg/L	0.0300	3.90	No Exceedance
BA01	UA	Compliance	01/10/2023	D12	Calcium, total	mg/L	120	423	No Exceedance
BA01	UA	Compliance	05/11/2023	D12R	Calcium, total	mg/L	120 J+	423	No Exceedance
BA01	UA	Compliance	07/24/2023	D13	Calcium, total	mg/L	110	423	No Exceedance
BA01	UA	Compliance	10/18/2023	D13R	Calcium, total	mg/L	120	423	No Exceedance
BA01	UA	Compliance	01/10/2023	D12	Chloride, total	mg/L	17.0	650	No Exceedance
BA01	UA	Compliance	05/11/2023	D12R	Chloride, total	mg/L	16.0	650	No Exceedance
BA01	UA	Compliance	07/24/2023	D13	Chloride, total	mg/L	18.0	650	No Exceedance
BA01	UA	Compliance	10/18/2023	D13R	Chloride, total	mg/L	15.0 J+	650	No Exceedance
BA01	UA	Compliance	01/10/2023	D12	Fluoride, total	mg/L	0.261	0.549	No Exceedance
BA01	UA	Compliance	05/11/2023	D12R	Fluoride, total	mg/L	0.24 J	0.549	No Exceedance
BA01	UA	Compliance	07/24/2023	D13	Fluoride, total	mg/L	0.25 UJ	0.549	No Exceedance
BA01	UA	Compliance	10/18/2023	D13R	Fluoride, total	mg/L	0.134	0.549	No Exceedance
BA01	UA	Compliance	01/10/2023	D12	pH (field)	SU	7.0	6.9/7.7	No Exceedance
BA01	UA	Compliance	05/11/2023	D12R	pH (field)	SU	6.8	6.9/7.7	Exceedance Not Confirmed
BA01	UA	Compliance	07/24/2023	D13	pH (field)	SU	6.7	6.9/7.7	Confirmed
BA01	UA	Compliance	10/18/2023	D13R	pH (field)	SU	6.5	6.9/7.7	Confirmed
BA01	UA	Compliance	01/10/2023	D12	Sulfate, total	mg/L	140	613	No Exceedance
BA01	UA	Compliance	05/11/2023	D12R	Sulfate, total	mg/L	130	613	No Exceedance
BA01	UA	Compliance	07/24/2023	D13	Sulfate, total	mg/L	150	613	No Exceedance
BA01	UA	Compliance	10/18/2023	D13R	Sulfate, total	mg/L	160	613	No Exceedance
BA01	UA	Compliance	01/10/2023	D12	Total Dissolved Solids	mg/L	630	2240	No Exceedance
BA01	UA	Compliance	05/11/2023	D12R	Total Dissolved Solids	mg/L	620 J+	2240	No Exceedance
BA01	UA	Compliance	07/24/2023	D13	Total Dissolved Solids	mg/L	640	2240	No Exceedance
BA01	UA	Compliance	10/18/2023	D13R	Total Dissolved Solids	mg/L	660	2240	No Exceedance
BA02	UA	Compliance	01/10/2023	D12	Boron, total	mg/L	0.0520	3.90	No Exceedance
BA02	UA	Compliance	05/15/2023	D12R	Boron, total	mg/L	0.0680 J+	3.90	No Exceedance
BA02	UA	Compliance	07/25/2023	D13	Boron, total	mg/L	0.0510 J+	3.90	No Exceedance
BA02	UA	Compliance	10/18/2023	D13R	Boron, total	mg/L	0.0550	3.90	No Exceedance
BA02	UA	Compliance	01/10/2023	D12	Calcium, total	mg/L	91.0	423	No Exceedance
BA02	UA	Compliance	05/15/2023	D12R	Calcium, total	mg/L	96.0 J+	423	No Exceedance
BA02	UA	Compliance	07/25/2023	D13	Calcium, total	mg/L	99.0	423	No Exceedance
BA02	UA	Compliance	10/18/2023	D13R	Calcium, total	mg/L	92.0	423	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT
BOTTOM ASH BASIN
CANTON, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Background	SSI Type
BA02	UA	Compliance	01/10/2023	D12	Chloride, total	mg/L	9.20	650	No Exceedance
BA02	UA	Compliance	05/15/2023	D12R	Chloride, total	mg/L	8.00	650	No Exceedance
BA02	UA	Compliance	07/25/2023	D13	Chloride, total	mg/L	11.0	650	No Exceedance
BA02	UA	Compliance	10/18/2023	D13R	Chloride, total	mg/L	9.00 J+	650	No Exceedance
BA02	UA	Compliance	01/10/2023	D12	Fluoride, total	mg/L	0.233 J	0.549	No Exceedance
BA02	UA	Compliance	05/15/2023	D12R	Fluoride, total	mg/L	0.185 J	0.549	No Exceedance
BA02	UA	Compliance	07/25/2023	D13	Fluoride, total	mg/L	0.322 J+	0.549	No Exceedance
BA02	UA	Compliance	10/18/2023	D13R	Fluoride, total	mg/L	0.147	0.549	No Exceedance
BA02	UA	Compliance	01/10/2023	D12	pH (field)	SU	7.2	6.9/7.7	No Exceedance
BA02	UA	Compliance	05/15/2023	D12R	pH (field)	SU	7.3	6.9/7.7	No Exceedance
BA02	UA	Compliance	07/25/2023	D13	pH (field)	SU	6.8	6.9/7.7	Confirmed
BA02	UA	Compliance	10/18/2023	D13R	pH (field)	SU	6.7	6.9/7.7	Confirmed
BA02	UA	Compliance	01/10/2023	D12	Sulfate, total	mg/L	12.0	613	No Exceedance
BA02	UA	Compliance	05/15/2023	D12R	Sulfate, total	mg/L	12.0	613	No Exceedance
BA02	UA	Compliance	07/25/2023	D13	Sulfate, total	mg/L	13.0	613	No Exceedance
BA02	UA	Compliance	10/18/2023	D13R	Sulfate, total	mg/L	12.0 J+	613	No Exceedance
BA02	UA	Compliance	01/10/2023	D12	Total Dissolved Solids	mg/L	500	2240	No Exceedance
BA02	UA	Compliance	05/15/2023	D12R	Total Dissolved Solids	mg/L	480 J	2240	No Exceedance
BA02	UA	Compliance	07/25/2023	D13	Total Dissolved Solids	mg/L	620	2240	No Exceedance
BA02	UA	Compliance	10/18/2023	D13R	Total Dissolved Solids	mg/L	530	2240	No Exceedance
BA02L	UA/PMP	Compliance	01/10/2023	D12	Boron, total	mg/L	0.0770	3.90	No Exceedance
BA02L	UA/PMP	Compliance	05/10/2023	D12R	Boron, total	mg/L	0.0680 J+	3.90	No Exceedance
BA02L	UA/PMP	Compliance	01/10/2023	D12	Calcium, total	mg/L	130	423	No Exceedance
BA02L	UA/PMP	Compliance	05/10/2023	D12R	Calcium, total	mg/L	77.0	423	No Exceedance
BA02L	UA/PMP	Compliance	01/10/2023	D12	Chloride, total	mg/L	5.30 B	650	No Exceedance
BA02L	UA/PMP	Compliance	05/10/2023	D12R	Chloride, total	mg/L	2.60	650	No Exceedance
BA02L	UA/PMP	Compliance	01/10/2023	D12	Fluoride, total	mg/L	0.445	0.549	No Exceedance
BA02L	UA/PMP	Compliance	05/10/2023	D12R	Fluoride, total	mg/L	0.403	0.549	No Exceedance
BA02L	UA/PMP	Compliance	01/10/2023	D12	pH (field)	SU	7.0	6.9/7.7	No Exceedance
BA02L	UA/PMP	Compliance	05/10/2023	D12R	pH (field)	SU	7.1	6.9/7.7	No Exceedance
BA02L	UA/PMP	Compliance	01/10/2023	D12	Sulfate, total	mg/L	94.0	613	No Exceedance
BA02L	UA/PMP	Compliance	05/10/2023	D12R	Sulfate, total	mg/L	14.0	613	No Exceedance
BA02L	UA/PMP	Compliance	01/10/2023	D12	Total Dissolved Solids	mg/L	480	2240	No Exceedance
BA02L	UA/PMP	Compliance	05/10/2023	D12R	Total Dissolved Solids	mg/L	370 J	2240	No Exceedance
BA03	UA	Compliance	01/10/2023	D12	Boron, total	mg/L	0.0200	3.90	No Exceedance
BA03	UA	Compliance	05/10/2023	D12R	Boron, total	mg/L	0.0240 J+	3.90	No Exceedance
BA03	UA	Compliance	07/24/2023	D13	Boron, total	mg/L	0.0450 J+	3.90	No Exceedance
BA03	UA	Compliance	10/17/2023	D13R	Boron, total	mg/L	0.0160	3.90	No Exceedance
BA03	UA	Compliance	01/10/2023	D12	Calcium, total	mg/L	100	423	No Exceedance
BA03	UA	Compliance	05/10/2023	D12R	Calcium, total	mg/L	100	423	No Exceedance
BA03	UA	Compliance	07/24/2023	D13	Calcium, total	mg/L	98.0	423	No Exceedance
BA03	UA	Compliance	10/17/2023	D13R	Calcium, total	mg/L	100	423	No Exceedance
BA03	UA	Compliance	01/10/2023	D12	Chloride, total	mg/L	6.50 B	650	No Exceedance
BA03	UA	Compliance	05/10/2023	D12R	Chloride, total	mg/L	6.40	650	No Exceedance
BA03	UA	Compliance	07/24/2023	D13	Chloride, total	mg/L	5.00	650	No Exceedance
BA03	UA	Compliance	10/17/2023	D13R	Chloride, total	mg/L	5.30	650	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT
BOTTOM ASH BASIN
CANTON, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Background	SSI Type
BA03	UA	Compliance	01/10/2023	D12	Fluoride, total	mg/L	0.257	0.549	No Exceedance
BA03	UA	Compliance	05/10/2023	D12R	Fluoride, total	mg/L	0.191 J	0.549	No Exceedance
BA03	UA	Compliance	07/24/2023	D13	Fluoride, total	mg/L	0.261 J+	0.549	No Exceedance
BA03	UA	Compliance	10/17/2023	D13R	Fluoride, total	mg/L	0.04 U	0.549	No Exceedance
BA03	UA	Compliance	01/10/2023	D12	pH (field)	SU	7.3	6.9/7.7	No Exceedance
BA03	UA	Compliance	05/10/2023	D12R	pH (field)	SU	6.7	6.9/7.7	Exceedance Not Confirmed
BA03	UA	Compliance	07/24/2023	D13	pH (field)	SU	6.9	6.9/7.7	No Exceedance
BA03	UA	Compliance	10/17/2023	D13R	pH (field)	SU	6.5	6.9/7.7	Exceedance Not Confirmed
BA03	UA	Compliance	01/10/2023	D12	Sulfate, total	mg/L	16.0	613	No Exceedance
BA03	UA	Compliance	05/10/2023	D12R	Sulfate, total	mg/L	19.0	613	No Exceedance
BA03	UA	Compliance	07/24/2023	D13	Sulfate, total	mg/L	17.0	613	No Exceedance
BA03	UA	Compliance	10/17/2023	D13R	Sulfate, total	mg/L	14.0	613	No Exceedance
BA03	UA	Compliance	01/10/2023	D12	Total Dissolved Solids	mg/L	480	2240	No Exceedance
BA03	UA	Compliance	05/10/2023	D12R	Total Dissolved Solids	mg/L	500 J	2240	No Exceedance
BA03	UA	Compliance	07/24/2023	D13	Total Dissolved Solids	mg/L	460	2240	No Exceedance
BA03	UA	Compliance	10/17/2023	D13R	Total Dissolved Solids	mg/L	440	2240	No Exceedance
BA03L	UA/PMP	Compliance	01/10/2023	D12	Boron, total	mg/L	0.370	3.90	No Exceedance
BA03L	UA/PMP	Compliance	05/10/2023	D12R	Boron, total	mg/L	0.480	3.90	No Exceedance
BA03L	UA/PMP	Compliance	09/06/2023	D13	Boron, total	mg/L	0.330	3.90	No Exceedance
BA03L	UA/PMP	Compliance	10/17/2023	D13R	Boron, total	mg/L	0.210	3.90	No Exceedance
BA03L	UA/PMP	Compliance	01/10/2023	D12	Calcium, total	mg/L	180	423	No Exceedance
BA03L	UA/PMP	Compliance	05/10/2023	D12R	Calcium, total	mg/L	190	423	No Exceedance
BA03L	UA/PMP	Compliance	09/06/2023	D13	Calcium, total	mg/L	200	423	No Exceedance
BA03L	UA/PMP	Compliance	10/17/2023	D13R	Calcium, total	mg/L	200	423	No Exceedance
BA03L	UA/PMP	Compliance	01/10/2023	D12	Chloride, total	mg/L	28.0	650	No Exceedance
BA03L	UA/PMP	Compliance	05/10/2023	D12R	Chloride, total	mg/L	26.0	650	No Exceedance
BA03L	UA/PMP	Compliance	09/06/2023	D13	Chloride, total	mg/L	13.0 J	650	No Exceedance
BA03L	UA/PMP	Compliance	10/17/2023	D13R	Chloride, total	mg/L	12.0	650	No Exceedance
BA03L	UA/PMP	Compliance	01/10/2023	D12	Fluoride, total	mg/L	0.242 J	0.549	No Exceedance
BA03L	UA/PMP	Compliance	05/10/2023	D12R	Fluoride, total	mg/L	0.205 J	0.549	No Exceedance
BA03L	UA/PMP	Compliance	09/06/2023	D13	Fluoride, total	mg/L	0.165 J	0.549	No Exceedance
BA03L	UA/PMP	Compliance	10/17/2023	D13R	Fluoride, total	mg/L	0.242	0.549	No Exceedance
BA03L	UA/PMP	Compliance	01/10/2023	D12	pH (field)	SU	6.9	6.9/7.7	No Exceedance
BA03L	UA/PMP	Compliance	05/10/2023	D12R	pH (field)	SU	6.7	6.9/7.7	Exceedance Not Confirmed
BA03L	UA/PMP	Compliance	09/06/2023	D13	pH (field)	SU	6.7	6.9/7.7	Confirmed
BA03L	UA/PMP	Compliance	10/17/2023	D13R	pH (field)	SU	6.4	6.9/7.7	Confirmed
BA03L	UA/PMP	Compliance	01/10/2023	D12	Sulfate, total	mg/L	370	613	No Exceedance
BA03L	UA/PMP	Compliance	05/10/2023	D12R	Sulfate, total	mg/L	360	613	No Exceedance
BA03L	UA/PMP	Compliance	09/06/2023	D13	Sulfate, total	mg/L	420	613	No Exceedance
BA03L	UA/PMP	Compliance	10/17/2023	D13R	Sulfate, total	mg/L	390	613	No Exceedance
BA03L	UA/PMP	Compliance	01/10/2023	D12	Total Dissolved Solids	mg/L	1,100	2240	No Exceedance
BA03L	UA/PMP	Compliance	05/10/2023	D12R	Total Dissolved Solids	mg/L	1,100 J	2240	No Exceedance
BA03L	UA/PMP	Compliance	09/06/2023	D13	Total Dissolved Solids	mg/L	1,900	2240	No Exceedance
BA03L	UA/PMP	Compliance	10/17/2023	D13R	Total Dissolved Solids	mg/L	1,200	2240	No Exceedance
BA04	UA	Compliance	01/10/2023	D12	Boron, total	mg/L	1.90	3.90	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT
BOTTOM ASH BASIN
CANTON, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Background	SSI Type
BA04	UA	Compliance	05/11/2023	D12R	Boron, total	mg/L	0.330 J+	3.90	No Exceedance
BA04	UA	Compliance	07/24/2023	D13	Boron, total	mg/L	1.90	3.90	No Exceedance
BA04	UA	Compliance	10/18/2023	D13R	Boron, total	mg/L	1.00	3.90	No Exceedance
BA04	UA	Compliance	01/10/2023	D12	Calcium, total	mg/L	140	423	No Exceedance
BA04	UA	Compliance	05/11/2023	D12R	Calcium, total	mg/L	130 J+	423	No Exceedance
BA04	UA	Compliance	07/24/2023	D13	Calcium, total	mg/L	130	423	No Exceedance
BA04	UA	Compliance	10/18/2023	D13R	Calcium, total	mg/L	140	423	No Exceedance
BA04	UA	Compliance	01/10/2023	D12	Chloride, total	mg/L	120	650	No Exceedance
BA04	UA	Compliance	05/11/2023	D12R	Chloride, total	mg/L	30.0	650	No Exceedance
BA04	UA	Compliance	07/24/2023	D13	Chloride, total	mg/L	54.0	650	No Exceedance
BA04	UA	Compliance	10/18/2023	D13R	Chloride, total	mg/L	42.0	650	No Exceedance
BA04	UA	Compliance	01/10/2023	D12	Fluoride, total	mg/L	0.316	0.549	No Exceedance
BA04	UA	Compliance	05/11/2023	D12R	Fluoride, total	mg/L	0.275	0.549	No Exceedance
BA04	UA	Compliance	07/24/2023	D13	Fluoride, total	mg/L	0.25 UJ	0.549	No Exceedance
BA04	UA	Compliance	10/18/2023	D13R	Fluoride, total	mg/L	0.04 U	0.549	No Exceedance
BA04	UA	Compliance	01/10/2023	D12	pH (field)	SU	6.9	6.9/7.7	No Exceedance
BA04	UA	Compliance	05/11/2023	D12R	pH (field)	SU	6.8	6.9/7.7	Exceedance Not Confirmed
BA04	UA	Compliance	07/24/2023	D13	pH (field)	SU	6.7	6.9/7.7	Exceedance Not Confirmed
BA04	UA	Compliance	10/18/2023	D13R	pH (field)	SU	7.0	6.9/7.7	No Exceedance
BA04	UA	Compliance	01/10/2023	D12	Sulfate, total	mg/L	160	613	No Exceedance
BA04	UA	Compliance	05/11/2023	D12R	Sulfate, total	mg/L	78.0	613	No Exceedance
BA04	UA	Compliance	07/24/2023	D13	Sulfate, total	mg/L	180	613	No Exceedance
BA04	UA	Compliance	10/18/2023	D13R	Sulfate, total	mg/L	160	613	No Exceedance
BA04	UA	Compliance	01/10/2023	D12	Total Dissolved Solids	mg/L	740	2240	No Exceedance
BA04	UA	Compliance	05/11/2023	D12R	Total Dissolved Solids	mg/L	740 J+	2240	No Exceedance
BA04	UA	Compliance	07/24/2023	D13	Total Dissolved Solids	mg/L	710	2240	No Exceedance
BA04	UA	Compliance	10/18/2023	D13R	Total Dissolved Solids	mg/L	760	2240	No Exceedance

Notes:
HSU = hydrostratigraphic unit:
 UA = Uppermost Aquifer
 UA/PMP = Uppermost Aquifer/Potential Migration Pathway
ID = identification
mg/L = milligrams per liter
NA = not applicable
R = resample
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.
 Confirmed: An exceedance was determined with comparison to a resample. If a determined exceedance is confirmed by resample, both the sample and resample are noted as confirmed.

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

TABLE 3
STATISTICAL BACKGROUND VALUES
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT
BOTTOM ASH BASIN
CANTON, IL

Parameter	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Background Value (LPL/UPL)
Boron (mg/L)	09/12/2016 - 06/26/2017	16	0	Non-parametric UPL	3.90
Calcium (mg/L)	09/12/2016 - 06/26/2017	16	0	Parametric UPL	423
Chloride (mg/L)	09/12/2016 - 06/26/2017	16	0	Non-parametric UPL	650
Fluoride (mg/L)	09/12/2016 - 06/26/2017	16	19	Parametric UPL (log-transformed)	0.549
pH (field) (SU)	09/12/2016 - 06/26/2017	16	0	Parametric LPL/UPL	6.9/7.7
Sulfate (mg/L)	09/12/2016 - 06/26/2017	16	0	Parametric UPL	613
Total Dissolved Solids (mg/L)	09/12/2016 - 06/26/2017	16	0	Parametric UPL	2240

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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FIGURES



MONITORING WELL LOCATION MAP

FIGURE 1



- | | | | |
|--|-------------------------------|--|---|
| | COMPLIANCE WELL | | GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD88) |
| | BACKGROUND WELL | | INFERRED GROUNDWATER ELEVATION |
| | MONITORING WELL | | GROUNDWATER FLOW DIRECTION |
| | REGULATED UNIT (SUBJECT UNIT) | | |

0 50 100 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 JANUARY 9, 2023

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
BOTTOM ASH BASIN
DUCK CREEK POWER PLANT
CANTON, ILLINOIS

FIGURE 2

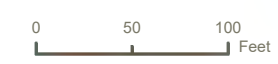
RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- COMPLIANCE WELL
- BACKGROUND WELL
- MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)

NOTES:
1. ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
2. ELEVATIONS IN BRACKETS WERE OBTAINED OUTSIDE OF THE 24 HOUR PERIOD FROM INITIATION OF DEPTH TO GROUNDWATER MEASUREMENTS BUT WITHIN THE SAME SAMPLING EVENT.
3. ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988.



POTENTIOMETRIC SURFACE MAP MAY 8, 2023

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
BOTTOM ASH BASIN
DUCK CREEK POWER PLANT
CANTON, ILLINOIS

FIGURE 3

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- | | | | |
|--|-----------------|--|---|
| | COMPLIANCE WELL | | GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD88) |
| | BACKGROUND WELL | | INFERRED GROUNDWATER ELEVATION |
| | MONITORING WELL | | GROUNDWATER FLOW DIRECTION |
| | | | REGULATED UNIT (SUBJECT UNIT) |

NOTES:
1. ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
2. ELEVATIONS IN BRACKETS WERE OBTAINED OUTSIDE OF THE 24 HOUR PERIOD FROM INITIATION OF DEPTH TO GROUNDWATER MEASUREMENTS BUT WITHIN THE SAME SAMPLING EVENT.
3. ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988.

POTENTIOMETRIC SURFACE MAP JULY 17, 2023

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
BOTTOM ASH BASIN
DUCK CREEK POWER PLANT
CANTON, ILLINOIS

FIGURE 4

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



PROJECT: 169000XXXX | DATED: 1/24/2024 | DESIGNER: egreaves
Y:\Mapping\Projects\22\2285\MXD\GW_Contours\Round_2023\Buck_Creek\BAB_205\205.aprx



- | | | | |
|--|-----------------|--|---|
| | COMPLIANCE WELL | | GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD88) |
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| | MONITORING WELL | | GROUNDWATER FLOW DIRECTION |
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NOTES:
1. ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
2. ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988.

0 50 100
Feet

POTENTIOMETRIC SURFACE MAP OCTOBER 16, 2023

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
BOTTOM ASH BASIN
DUCK CREEK POWER PLANT
CANTON, ILLINOIS

FIGURE 5

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

APPENDIX A

LABORATORY REPORTS AND FIELD DATA SHEETS



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

February 15, 2023

Daryl Johnson
Vistra - Duck Creek
17751 North Cilco Road
Canton, IL 61520-8761

Dear Daryl Johnson:

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,

A handwritten signature in cursive script that reads "Gail Schindler".

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



SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order GA01700

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



ANALYTICAL RESULTS

Sample: GA01700-01
Name: BA01
Matrix: Ground Water - Grab

Sampled: 01/10/23 12:16
Received: 01/11/23 07:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	17	mg/L		01/21/23 14:44	5	5.0	01/21/23 14:44	LAM	EPA 300.0 REV 2.1
Fluoride	0.261	mg/L		01/21/23 14:26	1	0.250	01/21/23 14:26	LAM	EPA 300.0 REV 2.1
Sulfate	140	mg/L		01/24/23 20:42	25	25	01/24/23 20:42	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	16.44	Feet		01/10/23 12:16	1		01/10/23 12:16	FIELD	Field*
Dissolved oxygen, Field	3.3	mg/L		01/10/23 12:16	1		01/10/23 12:16	FIELD	Field*
Oxidation Reduction Potential	32.0	mV		01/10/23 12:16	1	-500	01/10/23 12:16	FIELD	Field*
pH, Field Measured	6.95	pH Units		01/10/23 12:16	1		01/10/23 12:16	FIELD	Field*
Specific Conductance, Field Measured	970.0	umhos/cm		01/10/23 12:16	1		01/10/23 12:16	FIELD	Field*
Temperature, Field Measured	12.2	°C		01/10/23 12:16	1		01/10/23 12:16	FIELD	Field*
Turbidity, Field Measured	52.5	NTU		01/10/23 12:16	1	0.00	01/10/23 12:16	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	220	mg/L		01/17/23 10:08	1	2.0	01/17/23 10:08	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		01/17/23 10:08	1	2.0	01/17/23 10:08	HRF	SM 2320B 1997*
Solids - total dissolved solids (TDS)	630	mg/L		01/11/23 09:12	1	26	01/11/23 10:36	CPS	SM 2540C
Total Metals - PIA									
Boron	24	ug/L		01/16/23 09:23	5	10	01/18/23 08:53	JMW	EPA 6020A
Calcium	120	mg/L		01/19/23 08:31	5	0.20	01/20/23 11:58	JMW	EPA 6020A
Magnesium	60	mg/L		01/16/23 09:23	5	0.10	01/18/23 08:53	JMW	EPA 6020A
Potassium	1.0	mg/L	B	01/16/23 09:23	5	0.10	01/18/23 08:53	JMW	EPA 6020A
Sodium	13	mg/L		01/16/23 09:23	5	0.10	01/18/23 08:53	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: GA01700-02
Name: BA02
Matrix: Ground Water - Grab

Sampled: 01/10/23 13:15
Received: 01/11/23 07:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	9.2	mg/L		01/21/23 15:39	5	5.0	01/21/23 15:39	LAM	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		01/21/23 15:21	1	0.250	01/21/23 15:21	LAM	EPA 300.0 REV 2.1
Sulfate	12	mg/L		01/24/23 21:00	5	5.0	01/24/23 21:00	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	11.5	Feet		01/10/23 13:15	1		01/10/23 13:15	FIELD	Field*
Dissolved oxygen, Field	5.0	mg/L		01/10/23 13:15	1		01/10/23 13:15	FIELD	Field*
Oxidation Reduction Potential	56.0	mV		01/10/23 13:15	1	-500	01/10/23 13:15	FIELD	Field*
pH, Field Measured	7.22	pH Units		01/10/23 13:15	1		01/10/23 13:15	FIELD	Field*
Specific Conductance, Field Measured	861.0	umhos/cm		01/10/23 13:15	1		01/10/23 13:15	FIELD	Field*
Temperature, Field Measured	12.5	°C		01/10/23 13:15	1		01/10/23 13:15	FIELD	Field*
Turbidity, Field Measured	70.7	NTU		01/10/23 13:15	1	0.00	01/10/23 13:15	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	300	mg/L		01/17/23 10:08	1	2.0	01/17/23 10:08	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		01/17/23 10:08	1	2.0	01/17/23 10:08	HRF	SM 2320B 1997*
Solids - total dissolved solids (TDS)	500	mg/L		01/11/23 09:12	1	26	01/11/23 10:36	CPS	SM 2540C
Total Metals - PIA									
Boron	52	ug/L		01/16/23 09:23	5	10	01/18/23 08:56	JMW	EPA 6020A
Calcium	91	mg/L		01/19/23 08:31	5	0.20	01/20/23 12:01	JMW	EPA 6020A
Magnesium	45	mg/L		01/16/23 09:23	5	0.10	01/18/23 08:56	JMW	EPA 6020A
Potassium	1.5	mg/L	B	01/16/23 09:23	5	0.10	01/18/23 08:56	JMW	EPA 6020A
Sodium	42	mg/L		01/16/23 09:23	5	0.10	01/18/23 08:56	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: GA01700-03
Name: BA02L
Matrix: Ground Water - Grab

Sampled: 01/10/23 12:46
Received: 01/11/23 07:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	5.3	mg/L		01/21/23 15:57	1	1.0	01/21/23 15:57	LAM	EPA 300.0 REV 2.1
Fluoride	0.445	mg/L		01/21/23 15:57	1	0.250	01/21/23 15:57	LAM	EPA 300.0 REV 2.1
Sulfate	94	mg/L		01/24/23 21:55	10	10	01/24/23 21:55	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	11.35	Feet		01/10/23 12:46	1		01/10/23 12:46	FIELD	Field*
Dissolved oxygen, Field	6.2	mg/L		01/10/23 12:46	1		01/10/23 12:46	FIELD	Field*
Oxidation Reduction Potential	-99.0	mV		01/10/23 12:46	1	-500	01/10/23 12:46	FIELD	Field*
pH, Field Measured	7.00	pH Units		01/10/23 12:46	1		01/10/23 12:46	FIELD	Field*
Specific Conductance, Field Measured	772.0	umhos/cm		01/10/23 12:46	1		01/10/23 12:46	FIELD	Field*
Temperature, Field Measured	12.1	°C		01/10/23 12:46	1		01/10/23 12:46	FIELD	Field*
Turbidity, Field Measured	475	NTU		01/10/23 12:46	1	0.00	01/10/23 12:46	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO ₃	180	mg/L		01/17/23 10:08	1	2.0	01/17/23 10:08	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		01/17/23 10:08	1	2.0	01/17/23 10:08	HRF	SM 2320B 1997*
Solids - total dissolved solids (TDS)	480	mg/L		01/11/23 09:12	1	26	01/11/23 10:36	CPS	SM 2540C
<u>Total Metals - PIA</u>									
Boron	77	ug/L		01/16/23 09:23	5	10	01/18/23 09:00	JMW	EPA 6020A
Calcium	130	mg/L		01/19/23 08:31	5	0.20	01/20/23 12:05	JMW	EPA 6020A
Magnesium	62	mg/L		01/16/23 09:23	5	0.10	01/18/23 09:00	JMW	EPA 6020A
Potassium	1.8	mg/L	B	01/16/23 09:23	5	0.10	01/18/23 09:00	JMW	EPA 6020A
Sodium	5.0	mg/L		01/16/23 09:23	5	0.10	01/18/23 09:00	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: GA01700-04
Name: BA03
Matrix: Ground Water - Grab

Sampled: 01/10/23 11:09
Received: 01/11/23 07:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	6.5	mg/L		01/21/23 17:09	1	1.0	01/21/23 17:09	LAM	EPA 300.0 REV 2.1
Fluoride	0.257	mg/L		01/21/23 17:09	1	0.250	01/21/23 17:09	LAM	EPA 300.0 REV 2.1
Sulfate	16	mg/L		01/24/23 22:13	5	5.0	01/24/23 22:13	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	6.93	Feet		01/10/23 11:09	1		01/10/23 11:09	FIELD	Field*
Dissolved oxygen, Field	6.7	mg/L		01/10/23 11:09	1		01/10/23 11:09	FIELD	Field*
Oxidation Reduction Potential	229	mV		01/10/23 11:09	1	-500	01/10/23 11:09	FIELD	Field*
pH, Field Measured	7.31	pH Units		01/10/23 11:09	1		01/10/23 11:09	FIELD	Field*
Specific Conductance, Field Measured	829.0	umhos/cm		01/10/23 11:09	1		01/10/23 11:09	FIELD	Field*
Temperature, Field Measured	12.8	°C		01/10/23 11:09	1		01/10/23 11:09	FIELD	Field*
Turbidity, Field Measured	68.4	NTU		01/10/23 11:09	1	0.00	01/10/23 11:09	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO ₃	250	mg/L		01/17/23 10:08	1	2.0	01/17/23 10:08	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		01/17/23 10:08	1	2.0	01/17/23 10:08	HRF	SM 2320B 1997*
Solids - total dissolved solids (TDS)	480	mg/L		01/11/23 09:12	1	26	01/11/23 10:36	CPS	SM 2540C
<u>Total Metals - PIA</u>									
Boron	20	ug/L		01/16/23 09:23	5	10	01/18/23 09:03	JMW	EPA 6020A
Calcium	100	mg/L		01/19/23 08:31	5	0.20	01/20/23 12:09	JMW	EPA 6020A
Magnesium	51	mg/L		01/16/23 09:23	5	0.10	01/18/23 09:03	JMW	EPA 6020A
Potassium	0.95	mg/L	B	01/16/23 09:23	5	0.10	01/18/23 09:03	JMW	EPA 6020A
Sodium	6.8	mg/L		01/16/23 09:23	5	0.10	01/18/23 09:03	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: GA01700-05
Name: BA03L
Matrix: Ground Water - Grab

Sampled: 01/10/23 11:41
Received: 01/11/23 07:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	28	mg/L		01/21/23 18:03	5	5.0	01/21/23 18:03	LAM	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		01/21/23 17:45	1	0.250	01/21/23 17:45	LAM	EPA 300.0 REV 2.1
Sulfate	370	mg/L		01/24/23 22:31	50	50	01/24/23 22:31	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	6.55	Feet		01/10/23 11:41	1		01/10/23 11:41	FIELD	Field*
Dissolved oxygen, Field	4.0	mg/L		01/10/23 11:41	1		01/10/23 11:41	FIELD	Field*
Oxidation Reduction Potential	244	mV		01/10/23 11:41	1	-500	01/10/23 11:41	FIELD	Field*
pH, Field Measured	6.93	pH Units		01/10/23 11:41	1		01/10/23 11:41	FIELD	Field*
Specific Conductance, Field Measured	1470	umhos/cm		01/10/23 11:41	1		01/10/23 11:41	FIELD	Field*
Temperature, Field Measured	11.8	°C		01/10/23 11:41	1		01/10/23 11:41	FIELD	Field*
Turbidity, Field Measured	368	NTU		01/10/23 11:41	1	0.00	01/10/23 11:41	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	280	mg/L		01/17/23 10:08	1	2.0	01/17/23 10:08	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		01/17/23 10:08	1	2.0	01/17/23 10:08	HRF	SM 2320B 1997*
Solids - total dissolved solids (TDS)	1100	mg/L		01/11/23 09:12	1	26	01/11/23 10:36	CPS	SM 2540C
Total Metals - PIA									
Boron	370	ug/L		01/16/23 09:23	5	10	01/18/23 09:07	JMW	EPA 6020A
Calcium	180	mg/L		01/19/23 08:31	5	0.20	01/20/23 12:12	JMW	EPA 6020A
Magnesium	100	mg/L		01/16/23 09:23	5	0.10	01/18/23 09:07	JMW	EPA 6020A
Potassium	1.1	mg/L	B	01/16/23 09:23	5	0.10	01/18/23 09:07	JMW	EPA 6020A
Sodium	22	mg/L		01/16/23 09:23	5	0.10	01/18/23 09:07	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: GA01700-06
Name: BA04
Matrix: Ground Water - Grab

Sampled: 01/10/23 10:33
Received: 01/11/23 07:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	120	mg/L		01/21/23 19:16	50	50	01/21/23 19:16	LAM	EPA 300.0 REV 2.1
Fluoride	0.316	mg/L		01/21/23 18:39	1	0.250	01/21/23 18:39	LAM	EPA 300.0 REV 2.1
Sulfate	160	mg/L		01/24/23 22:49	50	50	01/24/23 22:49	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	7.88	Feet		01/10/23 10:33	1		01/10/23 10:33	FIELD	Field*
Dissolved oxygen, Field	4.8	mg/L		01/10/23 10:33	1		01/10/23 10:33	FIELD	Field*
Oxidation Reduction Potential	230	mV		01/10/23 10:33	1	-500	01/10/23 10:33	FIELD	Field*
pH, Field Measured	6.94	pH Units		01/10/23 10:33	1		01/10/23 10:33	FIELD	Field*
Specific Conductance, Field Measured	1280	umhos/cm		01/10/23 10:33	1		01/10/23 10:33	FIELD	Field*
Temperature, Field Measured	11.4	°C		01/10/23 10:33	1		01/10/23 10:33	FIELD	Field*
Turbidity, Field Measured	60.7	NTU		01/10/23 10:33	1	0.00	01/10/23 10:33	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO ₃	250	mg/L		01/17/23 10:08	1	2.0	01/17/23 10:08	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		01/17/23 10:08	1	2.0	01/17/23 10:08	HRF	SM 2320B 1997*
Solids - total dissolved solids (TDS)	740	mg/L		01/11/23 09:12	1	26	01/11/23 10:36	CPS	SM 2540C
<u>Total Metals - PIA</u>									
Boron	1900	ug/L		01/16/23 09:23	5	11	01/18/23 09:39	JMW	EPA 6020A
Calcium	140	mg/L		01/19/23 08:31	5	0.20	01/20/23 12:16	JMW	EPA 6020A
Magnesium	68	mg/L		01/16/23 09:23	5	0.10	01/18/23 09:39	JMW	EPA 6020A
Potassium	1.2	mg/L	B	01/16/23 09:23	5	0.10	01/18/23 09:39	JMW	EPA 6020A
Sodium	26	mg/L		01/16/23 09:23	5	0.10	01/18/23 09:39	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: GA01700-07
Name: BA05
Matrix: Ground Water - Grab

Sampled: 01/10/23 13:59
Received: 01/11/23 07:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	9.3	mg/L		01/21/23 19:34	1	1.0	01/21/23 19:34	LAM	EPA 300.0 REV 2.1
Fluoride	0.260	mg/L		01/21/23 19:34	1	0.250	01/21/23 19:34	LAM	EPA 300.0 REV 2.1
Sulfate	460	mg/L		01/24/23 23:07	100	100	01/24/23 23:07	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	21.03	Feet		01/10/23 13:59	1		01/10/23 13:59	FIELD	Field*
Dissolved oxygen, Field	5.3	mg/L		01/10/23 13:59	1		01/10/23 13:59	FIELD	Field*
Oxidation Reduction Potential	-58.0	mV		01/10/23 13:59	1	-500	01/10/23 13:59	FIELD	Field*
pH, Field Measured	7.06	pH Units		01/10/23 13:59	1		01/10/23 13:59	FIELD	Field*
Specific Conductance, Field Measured	1590	umhos/cm		01/10/23 13:59	1		01/10/23 13:59	FIELD	Field*
Temperature, Field Measured	12.2	°C		01/10/23 13:59	1		01/10/23 13:59	FIELD	Field*
Turbidity, Field Measured	127	NTU		01/10/23 13:59	1	0.00	01/10/23 13:59	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	300	mg/L		01/17/23 10:08	1	2.0	01/17/23 10:08	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		01/17/23 10:08	1	2.0	01/17/23 10:08	HRF	SM 2320B 1997*
Solids - total dissolved solids (TDS)	1200	mg/L		01/11/23 09:12	1	26	01/11/23 10:36	CPS	SM 2540C
Total Metals - PIA									
Boron	110	ug/L		01/16/23 09:23	5	11	01/18/23 09:42	JMW	EPA 6020A
Calcium	200	mg/L		01/19/23 08:31	5	0.20	01/20/23 12:23	JMW	EPA 6020A
Magnesium	100	mg/L		01/16/23 09:23	5	0.10	01/18/23 09:42	JMW	EPA 6020A
Potassium	3.0	mg/L		01/16/23 09:23	5	0.10	01/18/23 09:42	JMW	EPA 6020A
Sodium	42	mg/L		01/16/23 09:23	5	0.10	01/18/23 09:42	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: GA01700-08
Name: BA06
Matrix: Ground Water - Grab

Sampled: 01/10/23 14:56
Received: 01/11/23 07:00

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	590	mg/L		01/21/23 21:22	100	100	01/21/23 21:22	LAM	EPA 300.0 REV 2.1
Sulfate	300	mg/L		01/24/23 23:25	100	100	01/24/23 23:25	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	28.18	Feet		01/10/23 14:56	1		01/10/23 14:56	FIELD	Field*
Dissolved oxygen, Field	3.6	mg/L		01/10/23 14:56	1		01/10/23 14:56	FIELD	Field*
Oxidation Reduction Potential	-26.0	mV		01/10/23 14:56	1	-500	01/10/23 14:56	FIELD	Field*
pH, Field Measured	6.65	pH Units		01/10/23 14:56	1		01/10/23 14:56	FIELD	Field*
Specific Conductance, Field Measured	3090	umhos/cm		01/10/23 14:56	1		01/10/23 14:56	FIELD	Field*
Temperature, Field Measured	11.7	°C		01/10/23 14:56	1		01/10/23 14:56	FIELD	Field*
Turbidity, Field Measured	>1000	NTU		01/10/23 14:56	1	0.00	01/10/23 14:56	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO ₃	320	mg/L		01/17/23 10:08	1	2.0	01/17/23 10:08	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		01/17/23 10:08	1	2.0	01/17/23 10:08	HRF	SM 2320B 1997*
Fluoride	0.258	mg/L		01/27/23 13:28	1	0.250	01/27/23 13:28	ANK	SM 4500F C 1997
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	2100	mg/L		01/11/23 09:12	1	26	01/11/23 10:36	CPS	SM 2540C
<u>Total Metals - PIA</u>									
Boron	7300	ug/L		01/16/23 09:23	5	11	01/18/23 09:46	JMW	EPA 6020A
Calcium	300	mg/L		01/19/23 08:31	5	0.20	01/20/23 12:26	JMW	EPA 6020A
Magnesium	200	mg/L		01/16/23 09:23	5	0.10	01/18/23 09:46	JMW	EPA 6020A
Potassium	0.78	mg/L	B	01/16/23 09:23	5	0.10	01/18/23 09:46	JMW	EPA 6020A
Sodium	16	mg/L		01/16/23 09:23	5	0.10	01/18/23 09:46	JMW	EPA 6020A



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B322844 - No Prep - SM 2540C</u>									
Blank (B322844-BLK1)				Prepared & Analyzed: 01/11/23					
Solids - total dissolved solids (TDS)	< 17	mg/L							
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B322844-BS1)				Prepared & Analyzed: 01/11/23					
Solids - total dissolved solids (TDS)	953	mg/L		1000		95	84.9-109		
Solids - total dissolved solids (TDS)	953	mg/L		1000		95	84.9-109		
Duplicate (B322844-DUP1)				Sample: GA01700-03		Prepared & Analyzed: 01/11/23			
Solids - total dissolved solids (TDS)	480	mg/L			475			1	5
Solids - total dissolved solids (TDS)	480	mg/L			475			1	5
Duplicate (B322844-DUP2)				Sample: GA01700-08		Prepared & Analyzed: 01/11/23			
Solids - total dissolved solids (TDS)	2080	mg/L			2130			2	5
Solids - total dissolved solids (TDS)	2080	mg/L			2130			2	5
<u>Batch B323225 - SW 3015 - EPA 6020A</u>									
Blank (B323225-BLK1)				Prepared: 01/16/23 Analyzed: 01/18/23					
Boron	< 10	ug/L							
Magnesium	< 0.10	mg/L							
Potassium	0.173	mg/L							
Sodium	0.184	mg/L							
LCS (B323225-BS1)				Prepared: 01/16/23 Analyzed: 01/18/23					
Boron	618	ug/L		555.6		111	80-120		
Magnesium	5.61	mg/L		5.556		101	80-120		
Potassium	5.71	mg/L		5.556		103	80-120		
Sodium	5.63	mg/L		5.556		101	80-120		
<u>Batch B323535 - No Prep - SM 2320B 1997</u>									
Duplicate (B323535-DUP2)				Sample: GA01700-04		Prepared & Analyzed: 01/17/23			
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L			ND				10
<u>Batch B323536 - No Prep - SM 2320B 1997</u>									
Duplicate (B323536-DUP2)				Sample: GA01700-04		Prepared & Analyzed: 01/17/23			
Alkalinity - bicarbonate as CaCO ₃	250	mg/L			250			0	10
<u>Batch B323566 - SW 3015 - EPA 6020A</u>									
Blank (B323566-BLK1)				Prepared: 01/19/23 Analyzed: 01/20/23					
Calcium	< 0.20	mg/L							
LCS (B323566-BS1)				Prepared: 01/19/23 Analyzed: 01/20/23					
Calcium	5.44	mg/L		5.556		98	80-120		
<u>Batch B323854 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B323854-CCB1)				Prepared & Analyzed: 01/21/23					
Chloride	0.220	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B323854-CCV1)				Prepared & Analyzed: 01/21/23					
Chloride	5.42	mg/L		5.000		108	90-110		
Fluoride	5.42	mg/L		5.000		108	90-110		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B324042 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B324042-CCB1)				Prepared & Analyzed: 01/24/23					
Sulfate	0.00	mg/L							
Calibration Check (B324042-CCV1)				Prepared & Analyzed: 01/24/23					
Sulfate	4.77	mg/L		5.000		95	90-110		



NOTES

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

* Not a TNI accredited analyte

Certifications

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

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

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

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

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

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

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

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

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

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

USEPA DMR-QA Program

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

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

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

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

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

Qualifiers

B Present in the method blank at 173 ug/L.

Certified by: Gail Schindler, Project Manager



CHAIN-OF-CUSTODY / Analytical Request Document

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GA01700-20
SAB

Page: 1 of 7

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: Vistra Corp		Report To: Brian Voelker		Attention: Jason Stuckey	
Address: 13498 E. 900th St		Copy To: Jason Stuckey		Company Name: Vistra Corp	
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Address: see Section A	
Phone: (217) 753-8911 Fax:		Project Name:		Quote Reference:	
Requested Due Date/TAT: 10 day		Project Number: 2285		Project Manager:	
				Profile #:	
				REGULATORY AGENCY	
				NPDES GROUND WATER DRINKING WATER	
				UST RCRA OTHER	
				Site Location	
				STATE: IL	

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test ↓ Analysis Test ↓	Requested Analysis Filtered (Y/N)								Residual Chlorine (Y/N)	Project No./ Lab I.D.
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		DC_257_203	DC_257_204	DC_257_205	DC_811_204	DC_CLOSURE_201-202	DC_WPCP_203-206	DC_845_201-202			
1	BA01	WT	G	1/10/23	1216	2	X	X																			
2	BA02	WT	G	1/10/23	1315	2	X	X																			
3	BA02L	WT	G	1/10/23	1246	2	X	X																			
4	BA03	WT	G	1/10/23	1100	2	X	X																			
5	BA03L	WT	G	1/10/23	1141	2	X	X																			
6	BA04	WT	G	1/10/23	1033	2	X	X																			
7	BA05	WT	G	1/10/23	1354	2	X	X																			
8	BA06	WT	G	1/10/23	1456	4	X	X	X																		
9	G02S																										
10	G04S																										
11	G06L																										
12	G06S																										
13	G07L																										
14	G08L																										
15	G09L																										
16	G09S																										
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS													
DC-Q1-2023 Rev 2		<i>[Signature]</i>		1/10/23				<i>[Signature]</i>		1-11-23		700		0.9 Y N Y													

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: <i>Aaron Pemberton</i>					
SIGNATURE of SAMPLER: <i>[Signature]</i> DATE Signed (MM/DD/YYYY): <i>01/10/23</i>					

Courier

GA01700-20

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 4 of 7	
Company: Vistra Corp		Report To: Brian Voelker		Attention: Jason Stuckey		REGULATORY AGENCY	
Address: 13498 E. 900th St		Copy To: Jason Stuckey		Company Name: Vistra Corp			
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Address: see Section A			
Phone: (217) 753-8911 Fax:		Project Name:		Quote Reference:		NPDES GROUND WATER DRINKING WATER	
Requested Due Date/TAT: 10 day		Project Number: 2285		Project Manager:		UST RCRA OTHER	
				Profile #:		Site Location IL	

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	COLLECTED	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test ↓	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	Project No./ Lab I.D.
								Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		DC_257_203	DC_257_204	DC_257_205	DC_811_204	DC_CLOSURE_201-202	DC_WPCP_203-206	DC_845_201-202					
1	G66L	WT G	1/10/23	1315	2	X	X																					
2	G66S	WT G	1/10/23	1251	2	X	X																					
3	G67L	WT G	1/10/23	1401	2	X	X																					
4	G67S	WT G	1/10/23	1442	2	X	X																					
5	G70L	WT G	1/10/23	1029	2	X	X																					
6	G71L																											
7	G71S	WT G	1/10/23	1102	2	X	X																					
8	G72L																											
9	G73L	WT G	1/10/23	1133	2	X	X																					
10	OM01																											
11	OM04S																											
12	OM05S - DTW																											
13	OM07																											
14	OM08 - DTW																											
15	OM09 - DTW																											
16	OM10 - DTW																											

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	SAMPLE CONDITIONS			
DC-Q1-2023 Rev 2		<i>[Signature]</i>		1/10/23		<i>[Signature]</i>		1-11-23	700	0.9	Y	N	Y

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:					
SIGNATURE of SAMPLER: <i>[Signature]</i> DATE Signed (MM/DD/YY): 01/10/23					

count

GA01700-20

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: <u>Vistra Corp</u>		Report To: <u>Brian Voelker</u>		Attention: <u>Jason Stuckey</u>	
Address: <u>13498 E. 900th St</u>		Copy To: <u>Jason Stuckey</u>		Company Name: <u>Vistra Corp</u>	
Email To: <u>Brian.Voelker@VistraCorp.com</u>		Purchase Order No.:		Address: <u>see Section A</u>	
Phone: <u>(217) 753-8911</u> Fax:		Project Name:		Quote Reference:	
Requested Due Date/TAT: <u>10 day</u>		Project Number: <u>2285</u>		Project Manager:	
				Profile #:	
REGULATORY AGENCY					
NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐					
UST ☐ RCRA ☐ OTHER ☐					
Site Location					
STATE: <u>IL</u>					

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	Valid Matrix Codes CODE	COLLECTED	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analysis Test	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	Project No./ Lab I.D.			
											Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	DC_257_203	DC_257_204			DC_257_205	DC_811_204	DC_CLOSURE_201-202
1	OM12	WT	G		1/10/23	1515		S	X	X															
2	OM15 - DTW																								
3	OM16																								
4	OM17																								
5	OM21																								
6	OM22D	WT	G		1/10/23	1356		S	X	X															
7	OM22S - DTW																								
8	OM23D																								
9	OM23S - DTW																								
10	OM24D	WT	G		1/10/23	1136		S	X	X															
11	OM25D - DTW																								
12	OM25S	WT	G		1/10/23	1217		S	X	X															
13	OR02																								
14	OR03D																								
15	OR03S - DTW																								
16	OR04D																								
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS											
DC-Q1-2023 Rev 2				1/10/23				Vince Wayne		1-11-23		700		0.9 Y N Y											

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:					
SIGNATURE of SAMPLER:					
DATE Signed (MM/DD/YYYY): 01/10/23					

Courier

WELL/SAMPLE POINT **BA01**

Purge Method: Bladder

Date: 1/10/23 Start Time: 1147 Finish/Sample Time: 1216

Well Depth (Bottom) From MP: 36.24 ft top of pump Min. Purge Volume: 15 Gal / L

Depth to Water From MP: 16.44 ft Total Purge Volume: NA Gal / L

Water Column Length: 19.80 ft NA JR Max Drawdown: - ft

Well Water Volume: 3.1 Gal / L Total Drawdown: 0.0 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1201	16.44	100	6.96	970	12.26	38	3.14	55.1
2	1202	16.44	100	6.96	969	12.20	35	3.21	52.2
3	1203	16.44	100	6.95	970	12.22	32	3.28	52.5
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) <u>1000 mL</u>

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

Final DTW: 16.44 ft

Comments

Sampler's Signature: Joseph R Reed

WELL/SAMPLE POINT **BA02**

Purge Method: bladder

Date: 1/10/23 Start Time: 1247 Finish/Sample Time: 1315

Well Depth (Bottom) From MP: 20.35 ft Min. Purge Volume: 1.5 Gal / L

Depth to Water From MP: 11.50 ft Total Purge Volume: 1.8 Gal / L

Water Column Length: - ft Max Drawdown: NA ft

Well Water Volume: - Gal / L Total Drawdown: 2.30 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1302	12.31	100	7.23	864	12.51	46	5.03	71.2
2	1303	12.45	100	7.22	863	12.53	50	4.92	71.9
3	1304	12.60	100	7.22	861	12.54	56	4.95	70.7
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, 1000 mL)

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

Final DTW: 13.80 ft

Comments

Sampler's Signature: Joseph R Reed

Duck Creek

WELL/SAMPLE POINT **BA02L**

Purge Method:

Bladder passive

Date: 1/10/23 Start Time: 1220 Finish/Sample Time: 1246

Well Depth (Bottom) From MP: 11.55 ft top of pump Min. Purge Volume: 7.5 Gal / L

Depth to Water From MP: 11.35 ft Total Purge Volume: 1.1 Gal (L)

Water Column Length: — ft Max Drawdown: NA ft

Well Water Volume: — Gal / L Total Drawdown: NM 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	1230	Below pump	100	7.00	772	12.06	-99	6.19	475
2									
3									
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

Han'be

Sample Appearance:

Odor: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Color: ☐ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

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

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

Final DTW: NM ft

Comments: .20 ft in well only one read taken before sample

Sampler's Signature:

Joseph R Reed

Duck Creek

WELL/SAMPLE POINT **BA03**

Purge Method: Bladder

Date: 1/10/23 Start Time: 1038 Finish/Sample Time: 1109

Well Depth (Bottom) From MP: 26.34 ft top of pump Min. Purge Volume: 1.5 Gal (L)

Depth to Water From MP: 6.93 ft Total Purge Volume: 1.8 Gal (L)

Water Column Length: 19.41 ft NAJR Max Drawdown: — ft

Well Water Volume: 3.1 Gal / L Total Drawdown: 1.07 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1053	7.45	100	7.41	851	12.75	232	7.01	73.4
2	1054	7.51	100	7.38	839	12.77	235	6.85	71.1
3	1055	7.60	100	7.31	829	12.84	229	6.70	68.4
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Hori ba

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, 200mL) <u>1000mL</u>

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

Final DTW: 801 ft

Comments

Sampler's Signature: Joseph A Red

Duck Creek

WELL/SAMPLE POINT **BA03L**

Purge Method: Bladder

Date: 1/10/23 Start Time: 1110 Finish/Sample Time: 1141

Well Depth (Bottom) From MP: 9.58 ft top of pump Min. Purge Volume: 1.5 Gal (L)

Depth to Water From MP: 6.55 ft Total Purge Volume: 1.8 Gal (L)

Water Column Length: 3.03 ft NA JR Max Drawdown: NA ft

Well Water Volume: 1.83 Gal (L) Total Drawdown: 0.23 ft JR 0.25 ft.

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1125	6.80	100	6.95	1480	11.87	242	4.28	389
2	1126	6.80	100	6.93	1480	11.79	243	4.09	393
3	1127	6.80	100	6.93	1470	11.81	244	3.98	368
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

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

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

Final DTW: 6.80 ft

Comments

Sampler's Signature: Joseph R Real

WELL/SAMPLE POINT **BA04**

Purge Method: Bladder

Date: 1/10/23 Start Time: 1005 Finish/Sample Time: 1033

Well Depth (Bottom) From MP: 7.88 ft Min. Purge Volume: 1.5 Gal/L

Depth to Water From MP: 26.16 ft Top of pump Total Purge Volume: 1.8 Gal/L

Water Column Length: 18.28 ft Max Drawdown: NA ft

Well Water Volume: 11.06 Gal/L NR Total Drawdown: 0.12 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	1019	7.90	100	7.19	1340	11.30	227	5.09	50.4
2	1020	7.93	100	7.05	1300	11.37	231	4.90	56.7
3	1021	7.95	100	6.94	1280	11.41	230	4.79	60.7
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) <u>1000 mL</u>

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

Final DTW: 8.00 ft

Comments

Sampler's Signature: Joseph R Reed

WELL/SAMPLE POINT **BA05**

Purge Method: Bladder

Date: 1/10/23 Start Time: 1329 Finish/Sample Time: 1359
Well Depth (Bottom) From MP: 44.41 ft top of pump Min. Purge Volume: 1.5 Gal / L
Depth to Water From MP: 21.03 ft Total Purge Volume: 1.8 Gal / L
Water Column Length: 23.38 ft Max Drawdown: NA ft
Well Water Volume: 3.7 Gal / L Total Drawdown: 2.48 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	13:44	22.25	1.00	7.12	1590	11.97	-54	5.53	125
2	13:45	22.34		7.08	1580	12.15	-36	5.40	124
3	13:46	22.44		7.06	1590	12.21	-58	5.32	127
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horioba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

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

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

Final DTW: 23.51 ft

Comments

Sampler's Signature: Joseph R. Rast

Duck Creek

WELL/SAMPLE POINT **BA06**

Purge Method: Bladder

Date: 1/10/23 Start Time: 1401 Finish/Sample Time: 1456

Well Depth (Bottom) From MP: 40.72 ft TOP OF PUMP Min. Purge Volume: 1.5 Gal / L

Depth to Water From MP: 28.18 ft Total Purge Volume: 1.8 Gal / L

Water Column Length: 4.13 ft Max Drawdown: NA ft

Well Water Volume: NA Gal / L Total Drawdown: 4.13 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	1416	30.07	100	6.66	3090	11.68	-23	3.85	865
2	1417	30.12	100	6.65	3090	11.64	-23	3.68	>1000
3	1418	30.20	100	6.65	3090	11.66	-26	3.64	>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	☒	
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)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>1000 mL</u>
1	<u>2.5L HCL</u>

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

Final DTW: 32.31 ft

Comments

Sampler's Signature: Joseph R Red

Multiparameter Meter Field Calibration Checklist

Field Personnel: Kyle Leonard & Joe Reed			Location: Duck Creek		
Weather: 36° Sunny			Environment: MUD		
Multiparameter Water Meter		Make: Hanna	Model: Hanna	Serial Number: U4U1FVTF	
Water Level Meter		Make: Helson	Model: Water tape	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.	P	NA	NA	MSI	L344-09	12/14/2023
pH 7.00a	6.98	s.u.	±0.1 s.u.	P	NA	NA	MSI	L343-07	12/9/2023
pH 10.00a	10.05	s.u.	±0.1 s.u.	P	NA	NA	MSI	M082-04	3/25/2024
SC Zero (DI)	2.25	µS/cm	0<25 µS/cm	P	NA	NA	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2.049	µS/cm	±5%	P	NA	NA	Geotech	2GE1442	May-23
ORP	2.28	mV	±15 mV	P	NA	NA	InSitu	2G1762	Jun-23
DO (Zero pt)	0.04	mg/L	±0.1	P	NA	NA	Macron	#000228049	8/26/2025
DO (Saturated)	98.46	%	97-100%	P	NA	NA	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	1.39	NTU	<2 NTU	P	NA	NA	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 09:34	
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer
pH 4.00b	4.08	s.u.	±0.15 s.u.	P	NA	Geotech
pH 7.00b	7.03	s.u.	±0.15 s.u.	P	NA	Geotech
pH 10.00b	9.89	s.u.	±0.15 s.u.	P	NA	Geotech
SC 1000	1.078	µS/cm	±5%	P	NA	Ricca

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 15:31				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.06	s.u.	±0.1 s.u.	P	NA	NA	MSI	L315-04	11/22/2023
pH 7.00a	7.01	s.u.	±0.1 s.u.	P	NA	NA	MSI	L172-33	6/23/2023
pH 10.00a	9.94	s.u.	±0.1 s.u.	P	NA	NA	MSI	L354-22	1/5/2024
SC 1000	991	µS/cm	±5%	P	NA	NA	Ricca	2108D48	Jul-23
DO (Zero pt)	0.01	mg/L	±0.1 mg/L	P	NA	NA	Macron	#000228049	8/26/2025
Turbidity (DI)	1.48	NTU	<2 NTU	P	NA	NA	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 04:00				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments: *** Hanna, U52 (u)**

Signature: [Signature]	Date: 1-10-2023
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Multiparameter Meter Field Calibration Checklist

Field Personnel: KALEB DESKE		Location: DUCK CREEK	
Weather: 37° SUNNY WIND COMF E		Environment: PONDY, NO DUCKS, GRASSY	
Multiparameter Water Meter	Make: Hanna	Model: HORISTE 152	Serial Number: VFVDFVTF
Water Level Meter	Make: Hanna	Model: APPROX	Serial Number: 11F2209 305 ML

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.05	s.u.	±0.1 s.u.	Pass	NO	NA	MSI	L315-04	11/22/2023
pH 7.00a	7.02	s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
pH 10.00a	10.06	s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC Zero (DI)	13.20	µS/cm	0<25 µS/cm				Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1998	µS/cm	±5%				Geotech	1GK328	Nov-22
ORP	241.00	mV	±15 mV				InSitu	1GL481	Sep-22
DO (Zero pt)	0.06	mg/L	±0.1				Macron	#000228049	8/26/2025
DO (Saturated)	98.2%	%	97-100%				Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	1.02	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: 0926		
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	Geotech	1GF009	Jun-23
pH 7.00b	6.99	s.u.	±0.15 s.u.			Geotech	0GJ268	Oct-22
pH 10.00b	10.07	s.u.	±0.15 s.u.			Geotech	1GF458	Jun-23
SC 1000	1003	µS/cm	±5%			Ricca	2108D48	Jul-23

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: 1518			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.02	s.u.	±0.1 s.u.			NO	MSI	L315-04	11/22/2023
pH 7.00a	7.01	s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
pH 10.00a	10.06	s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000	998	µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)	0.02	mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)	1.21	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

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

Comments:

Signature: 	Date: 01/10/23
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Amron Pemberton</u>				Location: <u>Duck Creek</u>					
Weather: <u>30-45°F Sunny w/ breeze</u>				Environment: <u>grass, dirt, mud</u>					
Multiparameter Water Meter		Make: <u>Horiba</u>	Model: <u>V-5000</u>	Serial Number: <u>YL9K59HA</u>					
Water Level Meter		Make: <u>Solinst</u>	Model: <u>101</u>	Serial Number: <u>252879</u>					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.01</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>No</u>	<u>N/A</u>	MSI	L344-09	12/14/2023
pH 7.00a	<u>6.94</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>No</u>	<u>N/A</u>	MSI	L343-07	12/9/2023
pH 10.00a	<u>10.01</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>No</u>	<u>N/A</u>	MSI	M082-04	3/25/2024
SC Zero (DI)	<u>21.0</u>	µS/cm	0-25 µS/cm	<u>P</u>	<u>No</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2080</u>	µS/cm	±5%	<u>P</u>	<u>No</u>	<u>N/A</u>	Geotech	1GK328	Nov-22
ORP	<u>235</u>	mV	±15 mV	<u>P</u>	<u>No</u>	<u>N/A</u>	InSitu	2GC827	Dec-22
DO (Zero pt)	<u>0.04</u>	mg/L	±0.1	<u>P</u>	<u>No</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>—</u>	%	97-100%	<u>P</u>	<u>No</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>No</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

241 @ 16°C

ICV (Initial Calibration Verification)						Time: <u>0942</u>		
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	<u>3.91</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N/A</u>	Geotech	2GC243	Mar-24
pH 7.00b	<u>6.86</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N/A</u>	Geotech	2GC931	Mar-24
pH 10.00b	<u>9.93</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N/A</u>	Geotech	2GE820	May-24
SC 1000	<u>1040</u>	µS/cm	±5%	<u>P</u>	<u>N/A</u>	Ricca	4205H64	May-24

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: <u>1534</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.08</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>No</u>	<u>N/A</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>7.06</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>No</u>	<u>N/A</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>10.02</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>No</u>	<u>N/A</u>	MSI	L354-22	1/5/2024
SC 1000	<u>1020</u>	µS/cm	±5%	<u>P</u>	<u>No</u>	<u>N/A</u>	Ricca	2108D48	Jul-23
DO (Zero pt)	<u>0.04</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>No</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>No</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

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

Comments:

Signature: <u>[Signature]</u>	Date: <u>1/10/2022</u>
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Pace Analytical Services, LLC

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Peoria, IL 61615

(800)752-6651

June 13, 2023

Daryl Johnson
Vistra - Duck Creek
17751 North Cilco Road
Canton, IL 61520-8761

Dear Daryl Johnson:

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

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

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

Gail Schindler
Sincerely,

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



APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT, BOTTOM ASH BASIN
DC-257-205

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 GE02221

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



Work Order GE02226

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



Work Order GE02632

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



Work Order GE02767

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



Work Order GE02997

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



Case Narrative

G08L water level below top of pump

Sample GE02997-10 nitrate was originally reported at 10x dilution but it was discovered the sample was analyzed at a 5x dilution. The corrected raw data page is numbered 289a. The incorrect page has been removed and the corrected page has been added in its place.



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ANALYTICAL RESULTS

Sample: GE02221-18
Name: BA02L
Matrix: Ground Water - Grab

Sampled: 05/10/23 14:15
Received: 05/10/23 17:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	2.6	mg/L		05/11/23 16:09	1	1.0	05/12/23 03:11	CRD	EPA 300.0 REV 2.1
Sulfate	14	mg/L		05/22/23 18:50	5	5.0	05/22/23 18:50	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	7.91	Feet		05/10/23 14:15	1		05/10/23 14:15	FIELD	Field*
Dissolved oxygen, Field	0.30	mg/L		05/10/23 14:15	1		05/10/23 14:15	FIELD	Field*
Oxidation Reduction Potential	-122	mV		05/10/23 14:15	1	-500	05/10/23 14:15	FIELD	Field*
pH, Field Measured	7.12	pH Units		05/10/23 14:15	1		05/10/23 14:15	FIELD	Field*
Specific Conductance, Field Measured	583.0	umhos/cm		05/10/23 14:15	1		05/10/23 14:15	FIELD	Field*
Temperature, Field Measured	12.6	°C		05/10/23 14:15	1		05/10/23 14:15	FIELD	Field*
Turbidity, Field Measured	99.1	NTU		05/10/23 14:15	1	0.00	05/10/23 14:15	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO ₃	300	mg/L		05/19/23 09:32	1	10	05/19/23 09:32	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		05/19/23 09:32	1	10	05/19/23 09:32	CPS	SM 2320B 1997*
Fluoride	0.403	mg/L		05/24/23 11:04	1	0.250	05/24/23 11:04	TTH	SM 4500F C 1997
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	370	mg/L		05/17/23 11:18	1	26	05/17/23 17:16	HRF	SM 2540C
<u>Total Metals - PIA</u>									
Boron	68	ug/L		05/15/23 12:00	5	10	05/23/23 10:38	JMW	EPA 6020A
Calcium	77	mg/L		05/15/23 12:00	5	0.20	05/23/23 10:38	JMW	EPA 6020A
Magnesium	31	mg/L		05/15/23 12:00	5	0.10	05/23/23 10:38	JMW	EPA 6020A
Potassium	0.24	mg/L		05/15/23 12:00	5	0.10	05/23/23 10:38	JMW	EPA 6020A
Sodium	3.8	mg/L		05/15/23 12:00	5	0.10	05/23/23 10:38	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: GE02221-19
Name: BA03
Matrix: Ground Water - Grab

Sampled: 05/10/23 13:00
Received: 05/10/23 17:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	6.4	mg/L		05/25/23 12:00	1	1.0	05/25/23 12:00	CRD	EPA 300.0 REV 2.1
Sulfate	19	mg/L		05/25/23 12:21	5	5.0	05/25/23 12:21	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	6.11	Feet		05/10/23 13:00	1		05/10/23 13:00	FIELD	Field*
Dissolved oxygen, Field	5.0	mg/L		05/10/23 13:00	1		05/10/23 13:00	FIELD	Field*
Oxidation Reduction Potential	225	mV		05/10/23 13:00	1	-500	05/10/23 13:00	FIELD	Field*
pH, Field Measured	6.69	pH Units		05/10/23 13:00	1		05/10/23 13:00	FIELD	Field*
Specific Conductance, Field Measured	819.0	umhos/cm		05/10/23 13:00	1		05/10/23 13:00	FIELD	Field*
Temperature, Field Measured	15.4	°C		05/10/23 13:00	1		05/10/23 13:00	FIELD	Field*
Turbidity, Field Measured	42.0	NTU		05/10/23 13:00	1	0.00	05/10/23 13:00	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	460	mg/L		05/19/23 09:32	1	10	05/19/23 09:32	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		05/19/23 09:32	1	10	05/19/23 09:32	CPS	SM 2320B 1997*
Fluoride	< 0.250	mg/L		05/24/23 11:17	1	0.250	05/24/23 11:17	TTH	SM 4500F C 1997
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	500	mg/L		05/17/23 11:18	1	26	05/17/23 17:16	HRF	SM 2540C
<u>Total Metals - PIA</u>									
Boron	24	ug/L		05/15/23 12:00	5	10	05/23/23 10:42	JMW	EPA 6020A
Calcium	100	mg/L		05/15/23 12:00	5	0.20	05/23/23 10:42	JMW	EPA 6020A
Magnesium	51	mg/L		05/15/23 12:00	5	0.10	05/23/23 10:42	JMW	EPA 6020A
Potassium	0.71	mg/L		05/15/23 12:00	5	0.10	05/23/23 10:42	JMW	EPA 6020A
Sodium	7.1	mg/L		05/15/23 12:00	5	0.10	05/23/23 10:42	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: GE02221-20
Name: BA03 DUP
Matrix: Ground Water - Grab

Sampled: 05/10/23 13:00
Received: 05/10/23 17:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	6.5	mg/L		05/25/23 12:43	1	1.0	05/25/23 12:43	CRD	EPA 300.0 REV 2.1
Sulfate	19	mg/L		05/25/23 13:04	5	5.0	05/25/23 13:04	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	6.11	Feet		05/10/23 13:00	1		05/10/23 13:00	FIELD	Field*
Dissolved oxygen, Field	5.0	mg/L		05/10/23 13:00	1		05/10/23 13:00	FIELD	Field*
Oxidation Reduction Potential	225	mV		05/10/23 13:00	1	-500	05/10/23 13:00	FIELD	Field*
pH, Field Measured	6.69	pH Units		05/10/23 13:00	1		05/10/23 13:00	FIELD	Field*
Specific Conductance, Field Measured	819.0	umhos/cm		05/10/23 13:00	1		05/10/23 13:00	FIELD	Field*
Temperature, Field Measured	15.4	°C		05/10/23 13:00	1		05/10/23 13:00	FIELD	Field*
Turbidity, Field Measured	42.0	NTU		05/10/23 13:00	1	0.00	05/10/23 13:00	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	440	mg/L		05/19/23 09:32	1	10	05/19/23 09:32	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		05/19/23 09:32	1	10	05/19/23 09:32	CPS	SM 2320B 1997*
Fluoride	< 0.250	mg/L		05/24/23 11:19	1	0.250	05/24/23 11:19	TTH	SM 4500F C 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	500	mg/L		05/17/23 11:18	1	26	05/17/23 17:16	HRF	SM 2540C
Total Metals - PIA									
Boron	22	ug/L		05/15/23 12:00	5	10	05/23/23 10:45	JMW	EPA 6020A
Calcium	110	mg/L		05/15/23 12:00	5	0.20	05/23/23 10:45	JMW	EPA 6020A
Magnesium	52	mg/L		05/15/23 12:00	5	0.10	05/23/23 10:45	JMW	EPA 6020A
Potassium	0.72	mg/L		05/15/23 12:00	5	0.10	05/23/23 10:45	JMW	EPA 6020A
Sodium	7.2	mg/L		05/15/23 12:00	5	0.10	05/23/23 10:45	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: GE02226-01
Name: BA03L
Matrix: Ground Water - Grab

Sampled: 05/10/23 14:15
Received: 05/10/23 17:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	26	mg/L	Q4	05/12/23 16:25	10	10	05/12/23 16:25	CRD	EPA 300.0 REV 2.1
Sulfate	360	mg/L	Q4	05/12/23 16:47	100	100	05/12/23 16:47	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	5.73	Feet		05/10/23 14:15	1		05/10/23 14:15	FIELD	Field*
Dissolved oxygen, Field	2.7	mg/L		05/10/23 14:15	1		05/10/23 14:15	FIELD	Field*
Oxidation Reduction Potential	221	mV		05/10/23 14:15	1	-500	05/10/23 14:15	FIELD	Field*
pH, Field Measured	6.65	pH Units		05/10/23 14:15	1		05/10/23 14:15	FIELD	Field*
Specific Conductance, Field Measured	1380	umhos/cm		05/10/23 14:15	1		05/10/23 14:15	FIELD	Field*
Temperature, Field Measured	15.0	°C		05/10/23 14:15	1		05/10/23 14:15	FIELD	Field*
Turbidity, Field Measured	50.0	NTU		05/10/23 14:15	1	0.00	05/10/23 14:15	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO ₃	510	mg/L		05/19/23 09:32	1	10	05/19/23 09:32	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		05/19/23 09:32	1	10	05/19/23 09:32	CPS	SM 2320B 1997*
Fluoride	< 0.250	mg/L		05/24/23 11:28	1	0.250	05/24/23 11:28	TTH	SM 4500F C 1997
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	1100	mg/L		05/17/23 11:18	1	26	05/17/23 17:16	HRF	SM 2540C
<u>Total Metals - PIA</u>									
Boron	480	ug/L		05/15/23 12:00	5	10	05/23/23 10:49	JMW	EPA 6020A
Calcium	190	mg/L		05/15/23 12:00	5	0.20	05/23/23 10:49	JMW	EPA 6020A
Magnesium	98	mg/L		05/15/23 12:00	5	0.10	05/23/23 10:49	JMW	EPA 6020A
Potassium	0.32	mg/L		05/15/23 12:00	5	0.10	05/23/23 10:49	JMW	EPA 6020A
Sodium	28	mg/L		05/15/23 12:00	5	0.10	05/23/23 10:49	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: GE02632-01
Name: BA01
Matrix: Ground Water - Grab

Sampled: 05/11/23 13:33
Received: 05/11/23 17:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	16	mg/L	Q4	05/12/23 19:59	5	5.0	05/12/23 19:59	CRD	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		05/12/23 18:55	1	0.250	05/12/23 18:55	CRD	EPA 300.0 REV 2.1
Sulfate	130	mg/L	Q4	05/12/23 20:20	25	25	05/12/23 20:20	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	14.68	Feet		05/11/23 13:33	1		05/11/23 13:33	FIELD	Field*
Dissolved oxygen, Field	1.2	mg/L		05/11/23 13:33	1		05/11/23 13:33	FIELD	Field*
Oxidation Reduction Potential	58.0	mV		05/11/23 13:33	1	-500	05/11/23 13:33	FIELD	Field*
pH, Field Measured	6.79	pH Units		05/11/23 13:33	1		05/11/23 13:33	FIELD	Field*
Specific Conductance, Field Measured	796.0	umhos/cm		05/11/23 13:33	1		05/11/23 13:33	FIELD	Field*
Temperature, Field Measured	18.0	°C		05/11/23 13:33	1		05/11/23 13:33	FIELD	Field*
Turbidity, Field Measured	9.90	NTU		05/11/23 13:33	1	0.00	05/11/23 13:33	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	420	mg/L		05/22/23 09:02	1	10	05/22/23 09:02	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		05/22/23 09:02	1	10	05/22/23 09:02	CPS	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	620	mg/L	M	05/18/23 15:57	1	26	05/18/23 16:48	HRF	SM 2540C
Total Metals - PIA									
Boron	23	ug/L		05/15/23 12:00	5	10	05/23/23 14:48	JMW	EPA 6020A
Calcium	120	mg/L	Q4	05/15/23 12:00	5	0.20	05/23/23 12:07	JMW	EPA 6020A
Magnesium	58	mg/L	Q4	05/15/23 12:00	5	0.10	05/23/23 12:07	JMW	EPA 6020A
Potassium	0.74	mg/L		05/15/23 12:00	5	0.10	05/23/23 12:07	JMW	EPA 6020A
Sodium	15	mg/L		05/15/23 12:00	5	0.10	05/23/23 12:07	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: GE02632-02
Name: BA04
Matrix: Ground Water - Grab

Sampled: 05/11/23 11:40
Received: 05/11/23 17:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	30	mg/L		05/25/23 18:03	10	10	05/25/23 18:03	CRD	EPA 300.0 REV 2.1
Sulfate	78	mg/L		05/12/23 21:03	25	25	05/12/23 21:03	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	5.39	Feet		05/11/23 11:40	1		05/11/23 11:40	FIELD	Field*
Dissolved oxygen, Field	1.0	mg/L		05/11/23 11:40	1		05/11/23 11:40	FIELD	Field*
Oxidation Reduction Potential	178	mV		05/11/23 11:40	1	-500	05/11/23 11:40	FIELD	Field*
pH, Field Measured	6.75	pH Units		05/11/23 11:40	1		05/11/23 11:40	FIELD	Field*
Specific Conductance, Field Measured	942.0	umhos/cm		05/11/23 11:40	1		05/11/23 11:40	FIELD	Field*
Temperature, Field Measured	17.6	°C		05/11/23 11:40	1		05/11/23 11:40	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		05/11/23 11:40	1	0.00	05/11/23 11:40	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	410	mg/L		05/22/23 09:02	1	10	05/22/23 09:02	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		05/22/23 09:02	1	10	05/22/23 09:02	CPS	SM 2320B 1997*
Fluoride	0.275	mg/L		05/24/23 11:02	1	0.250	05/24/23 11:02	TTH	SM 4500F C 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	740	mg/L		05/18/23 15:57	1	26	05/18/23 16:48	HRF	SM 2540C
Total Metals - PIA									
Boron	330	ug/L		05/15/23 12:00	5	10	05/23/23 14:51	JMW	EPA 6020A
Calcium	130	mg/L		05/15/23 12:00	5	0.20	05/23/23 12:10	JMW	EPA 6020A
Magnesium	64	mg/L		05/15/23 12:00	5	0.10	05/23/23 12:10	JMW	EPA 6020A
Potassium	0.82	mg/L		05/15/23 12:00	5	0.10	05/23/23 12:10	JMW	EPA 6020A
Sodium	13	mg/L	Q3	05/15/23 12:00	5	0.10	05/23/23 12:10	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: GE02767-01
Name: BA05
Matrix: Ground Water - Grab

Sampled: 05/12/23 10:50
Received: 05/12/23 14:31

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	8.2	mg/L		05/13/23 01:28	1	1.0	05/13/23 01:28	CRD	EPA 300.0 REV 2.1
Sulfate	500	mg/L	Q4	05/13/23 02:43	100	100	05/13/23 02:43	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	18.13	Feet		05/12/23 10:50	1		05/12/23 10:50	FIELD	Field*
Dissolved oxygen, Field	3.0	mg/L		05/12/23 10:50	1		05/12/23 10:50	FIELD	Field*
Oxidation Reduction Potential	1.00	mV		05/12/23 10:50	1	-500	05/12/23 10:50	FIELD	Field*
pH, Field Measured	6.96	pH Units		05/12/23 10:50	1		05/12/23 10:50	FIELD	Field*
Specific Conductance, Field Measured	1560	umhos/cm		05/12/23 10:50	1		05/12/23 10:50	FIELD	Field*
Temperature, Field Measured	16.3	°C		05/12/23 10:50	1		05/12/23 10:50	FIELD	Field*
Turbidity, Field Measured	768	NTU		05/12/23 10:50	1	0.00	05/12/23 10:50	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	490	mg/L		05/23/23 10:23	1	10	05/23/23 10:23	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		05/23/23 10:23	1	10	05/23/23 10:23	CPS	SM 2320B 1997*
Fluoride	< 0.250	mg/L		05/24/23 12:34	1	0.250	05/24/23 12:34	TTH	SM 4500F C 1997
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	1200	mg/L		05/18/23 17:03	1	26	05/18/23 17:42	HRF	SM 2540C
<u>Total Metals - PIA</u>									
Boron	100	ug/L		05/16/23 09:02	5	10	05/19/23 11:32	JMW	EPA 6020A
Calcium	210	mg/L	Q4	05/16/23 09:02	5	0.20	05/19/23 11:32	JMW	EPA 6020A
Magnesium	97	mg/L		05/16/23 09:02	5	0.10	05/19/23 11:32	JMW	EPA 6020A
Potassium	3.0	mg/L		05/16/23 09:02	5	0.10	05/19/23 11:32	JMW	EPA 6020A
Sodium	43	mg/L		05/16/23 09:02	5	0.10	05/19/23 11:32	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: GE02767-02
Name: BA06
Matrix: Ground Water - Grab

Sampled: 05/12/23 12:19
Received: 05/12/23 14:31

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	510	mg/L		05/13/23 04:17	100	100	05/13/23 04:17	CRD	EPA 300.0 REV 2.1
Sulfate	340	mg/L		05/13/23 04:17	100	100	05/13/23 04:17	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	21.7	Feet		05/12/23 12:19	1		05/12/23 12:19	FIELD	Field*
Dissolved oxygen, Field	0.82	mg/L		05/12/23 12:19	1		05/12/23 12:19	FIELD	Field*
Oxidation Reduction Potential	-39.0	mV		05/12/23 12:19	1	-500	05/12/23 12:19	FIELD	Field*
pH, Field Measured	6.44	pH Units		05/12/23 12:19	1		05/12/23 12:19	FIELD	Field*
Specific Conductance, Field Measured	2930	umhos/cm		05/12/23 12:19	1		05/12/23 12:19	FIELD	Field*
Temperature, Field Measured	15.7	°C		05/12/23 12:19	1		05/12/23 12:19	FIELD	Field*
Turbidity, Field Measured	55.1	NTU		05/12/23 12:19	1	0.00	05/12/23 12:19	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	520	mg/L		05/23/23 10:23	1	10	05/23/23 10:23	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		05/23/23 10:23	1	10	05/23/23 10:23	CPS	SM 2320B 1997*
Fluoride	< 0.250	mg/L		05/24/23 11:13	1	0.250	05/24/23 11:13	TTH	SM 4500F C 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	2200	mg/L		05/18/23 17:03	1	26	05/18/23 17:42	HRF	SM 2540C
Total Metals - PIA									
Boron	8700	ug/L		05/16/23 09:02	5	10	05/19/23 11:35	JMW	EPA 6020A
Calcium	340	mg/L		05/16/23 09:02	5	0.20	05/19/23 11:35	JMW	EPA 6020A
Magnesium	210	mg/L		05/16/23 09:02	5	0.10	05/19/23 11:35	JMW	EPA 6020A
Potassium	0.57	mg/L		05/16/23 09:02	5	0.10	05/19/23 11:35	JMW	EPA 6020A
Sodium	18	mg/L		05/16/23 09:02	5	0.10	05/19/23 11:35	JMW	EPA 6020A



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

ANALYTICAL RESULTS

Sample: GE02997-01
Name: BA02
Matrix: Ground Water - Grab

Sampled: 05/15/23 11:23
Received: 05/16/23 06:50

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	8.0	mg/L	Q4	05/16/23 10:51	5	5.0	05/16/23 10:51	CRD	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		05/16/23 09:57	1	0.250	05/16/23 09:57	CRD	EPA 300.0 REV 2.1
Sulfate	12	mg/L	Q4	05/16/23 10:51	5	5.0	05/16/23 10:51	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	8.39	Feet		05/15/23 11:23	1		05/15/23 11:23	FIELD	Field*
Dissolved oxygen, Field	0.90	mg/L		05/15/23 11:23	1		05/15/23 11:23	FIELD	Field*
Oxidation Reduction Potential	228	mV		05/15/23 11:23	1	-500	05/15/23 11:23	FIELD	Field*
pH, Field Measured	7.30	pH Units		05/15/23 11:23	1		05/15/23 11:23	FIELD	Field*
Specific Conductance, Field Measured	897.0	umhos/cm		05/15/23 11:23	1		05/15/23 11:23	FIELD	Field*
Temperature, Field Measured	14.2	°C		05/15/23 11:23	1		05/15/23 11:23	FIELD	Field*
Turbidity, Field Measured	11.2	NTU		05/15/23 11:23	1	0.00	05/15/23 11:23	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO ₃	550	mg/L		05/24/23 09:25	1	10	05/24/23 09:25	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		05/24/23 09:25	1	10	05/24/23 09:25	CPS	SM 2320B 1997*
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	480	mg/L	M	05/19/23 12:22	1	26	05/19/23 13:18	HRF	SM 2540C
<u>Total Metals - PIA</u>									
Boron	68	ug/L		05/22/23 09:08	5	10	05/24/23 13:06	JMW	EPA 6020A
Calcium	96	mg/L		05/22/23 09:08	5	0.20	05/23/23 21:04	JMW	EPA 6020A
Magnesium	46	mg/L		05/22/23 09:08	5	0.10	05/23/23 21:04	JMW	EPA 6020A
Potassium	1.3	mg/L		05/22/23 09:08	5	0.10	05/24/23 13:06	JMW	EPA 6020A
Sodium	46	mg/L		05/22/23 09:08	5	0.10	05/24/23 13:06	JMW	EPA 6020A



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B333386 - SW 3015 - EPA 6020A</u>									
Blank (B333386-BLK1)				Prepared: 05/15/23 Analyzed: 05/23/23					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B333386-BS1)				Prepared: 05/15/23 Analyzed: 05/23/23					
Boron	482	ug/L		555.6		87	80-120		
Calcium	5.14	mg/L		5.556		93	80-120		
Magnesium	5.06	mg/L		5.556		91	80-120		
Potassium	5.14	mg/L		5.556		93	80-120		
Sodium	5.11	mg/L		5.556		92	80-120		
Matrix Spike (B333386-MS1)				Sample: GE02632-01 Prepared: 05/15/23 Analyzed: 05/23/23					
Boron	462	ug/L		555.6	23.4	79	75-125		
Calcium	105	mg/L	Q4	5.556	117	NR	75-125		
Magnesium	52.1	mg/L	Q4	5.556	57.9	NR	75-125		
Potassium	5.19	mg/L		5.556	0.743	80	75-125		
Sodium	16.7	mg/L	Q1	5.556	14.8	34	75-125		
Matrix Spike Dup (B333386-MSD1)				Sample: GE02632-01 Prepared: 05/15/23 Analyzed: 05/23/23					
Boron	477	ug/L		555.6	23.4	82	75-125	3	20
Calcium	110	mg/L	Q4	5.556	117	NR	75-125	4	20
Magnesium	54.2	mg/L	Q4	5.556	57.9	NR	75-125	4	20
Potassium	5.46	mg/L		5.556	0.743	85	75-125	5	20
Sodium	17.4	mg/L	Q2	5.556	14.8	48	75-125	4	20
<u>Batch B333398 - IC No Prep - EPA 300.0 REV 2.1</u>									
Matrix Spike (B333398-MS4)				Sample: GE02767-01 Prepared & Analyzed: 05/13/23					
Chloride	9.6	mg/L		1.500	8.2	96	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	495	NR	80-120		
Matrix Spike Dup (B333398-MSD4)				Sample: GE02767-01 Prepared & Analyzed: 05/13/23					
Sulfate	1.00E9	mg/L	Q4	1.500	495	NR	80-120	0	20
Chloride	9.5	mg/L		1.500	8.2	89	80-120	1	20
<u>Batch B333402 - IC No Prep - EPA 300.0 REV 2.1</u>									
Matrix Spike (B333402-MS1)				Sample: GE02226-01 Prepared & Analyzed: 05/12/23					
Sulfate	1.00E9	mg/L	Q4	1.500	364	NR	80-120		
Chloride	1.0E9	mg/L	Q4	1.500	26	NR	80-120		
Matrix Spike (B333402-MS2)				Sample: GE02632-01 Prepared: 05/13/23 Analyzed: 05/12/23					
Fluoride	1.56	mg/L		1.500	0.240	88	80-120		
Chloride	1.0E9	mg/L	Q4	1.500	16	NR	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	135	NR	80-120		
Matrix Spike Dup (B333402-MSD1)				Sample: GE02226-01 Prepared & Analyzed: 05/12/23					
Sulfate	1.00E9	mg/L	Q4	1.500	364	NR	80-120	0	20
Chloride	1.0E9	mg/L	Q4	1.500	26	NR	80-120	0	20
Matrix Spike Dup (B333402-MSD2)				Sample: GE02632-01 Prepared & Analyzed: 05/13/23					



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike Dup (B333402-MSD2) Sample: GE02632-01 Prepared & Analyzed: 05/13/23									
Sulfate	1.00E9	mg/L	Q4	1.500	135	NR	80-120	0	20
Chloride	1.0E9	mg/L	Q4	1.500	16	NR	80-120	0	20
Fluoride	1.66	mg/L		1.500	0.240	95	80-120	6	20
Batch B333464 - SW 3015 - EPA 6020A									
Blank (B333464-BLK1) Prepared: 05/16/23 Analyzed: 05/19/23									
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B333464-BS1) Prepared: 05/16/23 Analyzed: 05/19/23									
Boron	1080	ug/L		1111		97	80-120		
Calcium	5.58	mg/L		5.556		101	80-120		
Magnesium	5.39	mg/L		5.556		97	80-120		
Potassium	5.55	mg/L		5.556		100	80-120		
Sodium	5.65	mg/L		5.556		102	80-120		
Matrix Spike (B333464-MS1) Sample: GE02767-01 Prepared: 05/16/23 Analyzed: 05/19/23									
Boron	648	ug/L		555.6	99.6	99	75-125		
Calcium	212	mg/L	Q4	5.556	210	46	75-125		
Magnesium	101	mg/L		5.556	96.6	79	75-125		
Potassium	8.34	mg/L		5.556	2.96	97	75-125		
Sodium	48.2	mg/L		5.556	43.2	90	75-125		
Matrix Spike Dup (B333464-MSD1) Sample: GE02767-01 Prepared: 05/16/23 Analyzed: 05/19/23									
Boron	637	ug/L		555.6	99.6	97	75-125	2	20
Calcium	214	mg/L	Q4	5.556	210	76	75-125	0.8	20
Magnesium	101	mg/L		5.556	96.6	84	75-125	0.3	20
Potassium	8.40	mg/L		5.556	2.96	98	75-125	0.7	20
Sodium	48.3	mg/L		5.556	43.2	90	75-125	0.08	20
Batch B333629 - No Prep - SM 2540C									
Blank (B333629-BLK1) Prepared & Analyzed: 05/17/23									
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B333629-BS1) Prepared & Analyzed: 05/17/23									
Solids - total dissolved solids (TDS)	1030	mg/L		1000		103	84.9-109		
Batch B333648 - IC No Prep - EPA 300.0 REV 2.1									
Matrix Spike (B333648-MS1) Sample: GE02997-01 Prepared & Analyzed: 05/16/23									
Fluoride	1.54	mg/L		1.500	0.185	90	80-120		
Chloride	1.0E9	mg/L	Q4	1.500	8.0	NR	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	12.0	NR	80-120		
Matrix Spike Dup (B333648-MSD1) Sample: GE02997-01 Prepared & Analyzed: 05/16/23									
Fluoride	1.51	mg/L		1.500	0.185	89	80-120	2	20
Chloride	1.0E9	mg/L	Q4	1.500	8.0	NR	80-120	0	20
Sulfate	1.00E9	mg/L	Q4	1.500	12.0	NR	80-120	0	20
Batch B333806 - No Prep - SM 2540C									



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (B333806-BLK1)				Prepared & Analyzed: 05/18/23					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B333806-BS1)				Prepared & Analyzed: 05/18/23					
Solids - total dissolved solids (TDS)	983	mg/L		1000		98	84.9-109		
Duplicate (B333806-DUP1)				Prepared & Analyzed: 05/18/23					
	Sample: GE02632-01								
Solids - total dissolved solids (TDS)	575	mg/L	M		620			8	5
<u>Batch B333818 - No Prep - SM 2540C</u>									
Blank (B333818-BLK1)				Prepared & Analyzed: 05/18/23					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B333818-BS1)				Prepared & Analyzed: 05/18/23					
Solids - total dissolved solids (TDS)	923	mg/L		1000		92	84.9-109		
Duplicate (B333818-DUP1)				Prepared & Analyzed: 05/18/23					
	Sample: GE02767-01								
Solids - total dissolved solids (TDS)	1220	mg/L			1200			2	5
<u>Batch B333887 - No Prep - SM 2540C</u>									
Blank (B333887-BLK1)				Prepared & Analyzed: 05/19/23					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B333887-BS1)				Prepared & Analyzed: 05/19/23					
Solids - total dissolved solids (TDS)	940	mg/L		1000		94	84.9-109		
Duplicate (B333887-DUP1)				Prepared & Analyzed: 05/19/23					
	Sample: GE02997-01								
Solids - total dissolved solids (TDS)	530	mg/L	M		485			9	5
<u>Batch B333906 - No Prep - SM 2320B 1997</u>									
Blank (B333906-BLK1)				Prepared & Analyzed: 05/19/23					
Alkalinity - bicarbonate as CaCO ₃	2.50	mg/L							
Blank (B333906-BLK2)				Prepared & Analyzed: 05/19/23					
Alkalinity - bicarbonate as CaCO ₃	2.50	mg/L							
<u>Batch B333977 - SW 3015 - EPA 6020A</u>									
Blank (B333977-BLK1)				Prepared: 05/22/23 Analyzed: 05/24/23					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L	Ba						
Sodium	0.126	mg/L	B						
LCS (B333977-BS1)				Prepared: 05/22/23 Analyzed: 05/24/23					
Boron	548	ug/L		555.6		99	80-120		
Calcium	5.48	mg/L		5.556		99	80-120		
Magnesium	5.66	mg/L		5.556		102	80-120		
Potassium	5.59	mg/L		5.556		101	80-120		
Sodium	5.59	mg/L		5.556		101	80-120		
Matrix Spike (B333977-MS1)				Prepared: 05/22/23 Analyzed: 05/24/23					
	Sample: GE02997-01								
Boron	619	ug/L		555.6	68.0	99	75-125		
Calcium	100	mg/L		5.556	96.0	77	75-125		
Magnesium	51.0	mg/L		5.556	46.2	87	75-125		
Potassium	7.00	mg/L		5.556	1.34	102	75-125		
Sodium	51.3	mg/L		5.556	46.4	88	75-125		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike Dup (B333977-MSD1) Sample: GE02997-01 Prepared: 05/22/23 Analyzed: 05/24/23									
Boron	633	ug/L		555.6	68.0	102	75-125	2	20
Calcium	101	mg/L		5.556	96.0	91	75-125	0.8	20
Magnesium	51.4	mg/L		5.556	46.2	94	75-125	0.7	20
Potassium	7.30	mg/L		5.556	1.34	107	75-125	4	20
Sodium	51.8	mg/L		5.556	46.4	96	75-125	0.9	20
Batch B334050 - No Prep - SM 2320B 1997									
Duplicate (B334050-DUP1) Sample: GE02632-01 Prepared & Analyzed: 05/22/23									
Alkalinity - carbonate as CaCO ₃	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO ₃	438	mg/L			425			3	10
Batch B334096 - SW 3015 - EPA 6020A									
Blank (B334096-BLK1) Prepared: 05/23/23 Analyzed: 05/25/23									
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B334096-BS1) Prepared: 05/23/23 Analyzed: 05/25/23									
Boron	568	ug/L		555.6		102	80-120		
Calcium	5.61	mg/L		5.556		101	80-120		
Magnesium	5.87	mg/L		5.556		106	80-120		
Potassium	5.70	mg/L		5.556		103	80-120		
Sodium	5.84	mg/L		5.556		105	80-120		
Batch B334098 - SW 3015 - EPA 6020A									
Blank (B334098-BLK1) Prepared: 05/23/23 Analyzed: 05/26/23									
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B334098-BS1) Prepared: 05/23/23 Analyzed: 05/26/23									
Boron	557	ug/L		555.6		100	80-120		
Calcium	5.84	mg/L		5.556		105	80-120		
Magnesium	5.74	mg/L		5.556		103	80-120		
Potassium	5.71	mg/L		5.556		103	80-120		
Sodium	5.62	mg/L		5.556		101	80-120		
Batch B334164 - No Prep - SM 2320B 1997									
Duplicate (B334164-DUP2) Sample: GE02767-01 Prepared & Analyzed: 05/23/23									
Alkalinity - carbonate as CaCO ₃	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO ₃	500	mg/L			488			3	10
Batch B334208 - No Prep - SM 4500F C 1997									
Matrix Spike (B334208-MS2) Sample: GE02226-01 Prepared & Analyzed: 05/24/23									
Fluoride	1.19	mg/L		1.000	0.205	98	80-120		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike (B334208-MS4)	Sample: GE02767-01			Prepared & Analyzed: 05/24/23					
Fluoride	1.22	mg/L		1.000	0.228	100	80-120		
Matrix Spike Dup (B334208-MSD2)	Sample: GE02226-01			Prepared & Analyzed: 05/24/23					
Fluoride	1.23	mg/L		1.000	0.205	102	80-120	3	20
Matrix Spike Dup (B334208-MSD4)	Sample: GE02767-01			Prepared & Analyzed: 05/24/23					
Fluoride	1.24	mg/L		1.000	0.228	102	80-120	2	20
<u>Batch B334267 - No Prep - SM 2320B 1997</u>									
Duplicate (B334267-DUP1)	Sample: GE02997-01			Prepared & Analyzed: 05/24/23					
Alkalinity - bicarbonate as CaCO ₃	475	mg/L			550			15	10
Alkalinity - carbonate as CaCO ₃	< 10	mg/L			ND				10



NOTES

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

* Not a TNI accredited analyte

Certifications

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

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

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

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

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

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

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

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

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

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

USEPA DMR-QA Program

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

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

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

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

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

Qualifiers

- B Present in the method blank at 126 ug/L.
- Ba Present in the method blank at 232 ug/L.
- 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.

Gail Schindler



Certified by: Gail Schindler, 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 9

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT, BOTTOM ASH BASIN
DC-257-205

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: Visira Corp		Report To: Brian Voelker		Attention: Jason Stuckey	
Address: 13498 E. 900th St		Copy To: Jason Stuckey		Company Name: Visira Corp	
Email To: Brian.Voelker@VisiraCorp.com		Purchase Order No.:		Address: see Section A	
Phone: (217) 763-8911 Fax:		Project Name:		Quote Reference:	
Requested Due Date/TAT: 10 day		Project Number: 2285		Project Manager:	
				Profile #:	

Section D Required Client Information		Valid Matrix Codes		Matrix Code (see valid codes to left)		Sample Type (G=Grab C=Comp)		Collected		Sample Temp at Collection		# of Containers		Preservatives		Analysis Test		Requested Analysis Filtered (Y/N)		Project No./ Lab I.D.	
Item #	Required Client Information	Matrix Code	Valid Matrix Codes	Matrix Code	Sample Type	Collected	Sample Temp at Collection	# of Containers	Preservatives	Analysis Test	Requested Analysis Filtered (Y/N)	Project No./ Lab I.D.									
1	DC BA01	DC BA01	DRINKING WATER DW	DC BA01																	
2	DC BA02	DC BA02	WASTE WATER WW	DC BA02																	
3	DC BA02IL	DC BA02IL	WASTE WATER PRODUCT P	DC BA02IL																	
4	DC BA03	DC BA03	WASTE WATER SOLID S	DC BA03																	
5	DC BA03IL	DC BA03IL	WASTE WATER SOLID S	DC BA03IL																	
6	DC BA04	DC BA04	WASTE WATER SOLID S	DC BA04																	
7	DC BA05#	DC BA05#	WASTE WATER SOLID S	DC BA05#																	
8	DC BA06	DC BA06	WASTE WATER SOLID S	DC BA06																	
9	DC G02IL	DC G02IL	WASTE WATER SOLID S	DC G02IL																	
10	DC G02#S	DC G02#S	WASTE WATER SOLID S	DC G02#S																	
11	DC G02&D	DC G02&D	WASTE WATER SOLID S	DC G02&D																	
12	DC G03IL	DC G03IL	WASTE WATER SOLID S	DC G03IL																	
13	DC G04IL	DC G04IL	WASTE WATER SOLID S	DC G04IL																	
14	DC G06IL	DC G06IL	WASTE WATER SOLID S	DC G06IL																	
15	DC G06#S	DC G06#S	WASTE WATER SOLID S	DC G06#S																	
16	DC G07IL	DC G07IL	WASTE WATER SOLID S	DC G07IL																	

Section E Additional Comments		Relinquished By / Affiliation		Date		Time		Accepted By / Affiliation		Date		Time		Sample Conditions	
DC-23Q2-Rev 0		Jason Stuckey		5/10/23		1720		Jason Stuckey		5/10/23		1720		Temp in °C 3.3	
		Signature of Sampler:		Date Signed (MM/DD/YY):				Signature of Custodian:		Date Signed (MM/DD/YY):				Received on (Y/N)	
		Signature of Sampler:		Date Signed (MM/DD/YY):				Signature of Custodian:		Date Signed (MM/DD/YY):				Received on (Y/N)	
		Signature of Sampler:		Date Signed (MM/DD/YY):				Signature of Custodian:		Date Signed (MM/DD/YY):				Received on (Y/N)	

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT, BOTTOM ASH BASIN

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

Page: 2 of 9

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Vistra Corp	Report To:	Brian Voelker	Attention:	Jason Stuckey
Address:	13498 E. 900th St	Copy To:	Jason Stuckey	Company Name:	Vistra Corp
Email To:	Brian.Voelker@VistraCorp.com	Purchase Order No.:		Address:	See Section A
Phone:	(217) 753-8911	Project Name:		Quote Reference:	
Requested Due Date/AT:	10 day	Project Number:	2285	Project Manager:	
				Profile #:	

Section D Required Client Information		Valid Matrix Codes		Matrix Code (see valid codes to left)		COLLECTED		SAMPLE TEMP AT COLLECTION		# OF CONTAINERS		Preservatives		Requested Analysis Filtered (Y/N)		Project No./ Lab I.D.																	
ITEM #	Sample ID (A-Z, 0-9 / -)	DRINKING WATER	WASTE WATER	PRODUCT	ROIL/SOLID	SL	DL	OT	TS	DATE	TIME	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ SO ₄	Methanol	Other	Y/N	Y/N	DC_257_203	DC_257_204	DC_257_205	DC_846_203	DC_846_204	DC_846_205	DC_CLOSURE_201-202	DC_SUP_000	DC_WPCP_203-206	Residual Chlorine (Y/N)		
1	DC_G081L																																
2	DC_G091L																																
3	DC_G121L																																
4	DC_G12#S																																
5	DC_G141L																																
6	DC_G151L																																
7	DC_G161L																																
8	DC_G501L																																
9	DC_G50#S																																
10	DC_G511L																																
11	DC_G51#S																																
12	DC_G521L																																
13	DC_G52#S																																
14	DC_G531L																																
15	DC_G53#S																																
16	DC_G541L																																

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
DC-23Q2-Rev 0		Jason Voelker	5/10/23	1720	Jason Voelker	5-10-23	1720	33
		PRINT Name of SAMPLER:			DATE Signed (MM/DD/YY):			
		SIGNATURE of SAMPLER:			DATE Signed (MM/DD/YY):			

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT, BOTTOM ASH BASIN

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Vistra Corp	Report To:	Brian Voelker	Attention:	Jason Stuckey
Address:	13498 E. 900th St	Copy To:	Jason Stuckey	Company Name:	Vistra Corp
Email To:	Brian.Voelker@VistraCorp.com	Purchase Order No.:		Address:	see Section A
Phone:	(217) 753-8911	Project Name:		Order Reference:	
Requested Due Date/TAT:	10 day	Project Number:	2285	Project Manager:	
				Profile #:	

Section D Required Client Information		Valid Matrix Codes		Matrix Code		Sample Type (G=GRAB C=COMP)		COLLECTED		# OF CONTAINERS		Preservatives		Requested Analysis Filtered (Y/N)		Project No./ Lab I.D.	
ITEM #	Sample ID (A-Z, 0-9 / . -) Sample IDs MUST BE UNIQUE	DRINKING WATER WATER WASTE WATER PRODUCT SOIL/SOLID OIL WIFE AIR OTHER TISSUE	CODE DW WT WW P GL OL W AR OT TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME
1	DC_G54#S					5/10/23	1528										
2	DC_G55IL																
3	DC_G55#S																
4	DC_G56IL																
5	DC_G56#S																
6	DC_G57IL																
7	DC_G57#S																
8	DC_G58IL																
9	DC_G58#S																
10	DC_G59IL																
11	DC_G59#S																
12	DC_G60IL																
13	DC_G60#S																
14	DC_G61#S																
15	DC_G62IL																
16	DC_G63IL																

SAMPLER NAME AND SIGNATURE		DATE SIGNED (MM/DD/YYYY):	
PRINT Name of SAMPLER:		5/10/23	
SIGNATURE of SAMPLER:		5/10/23	

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28

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT, BOTTOM ASH BASIN

DC257-205

Company: Visira Corp	Report To: Brian Voelker	Attention: Jason Stuckey
Address: 13498 E. 900th St	Copy To: Jason Stuckey	Company Name: Visira Corp
Email To: Brian.Voelker@VisiraCorp.com	Purchase Order No.:	Address: see Section A
Phone: (217) 753-8911	Project Name:	Quote Reference:
Fax:	Project Number: 2285	Project Manager:
Requested Due Date/TAT: 10 day		Profile #:

Section D Required Client Information		Valid Matrix Codes		MATRIX CODE		SAMPLE ID (A-Z, 0-9 / .)		Sample IDs MUST BE UNIQUE	
ITEM #		MATRIX	CODE						
1	DC_OM04#S	DRINKING WATER	DW						
2	DC_OM05#S	WASTE WATER	WW						
3	DC_OM07	PRODUCED WATER	PW						
4	DC_OM08	SOIL	SL						
5	DC_OM09	SLURRY	SL						
6	DC_OM10	WIRE	WL						
7	DC_OM12	AIR	AR						
8	DC_OM15	OTHER	OT						
9	DC_OM16	TISSUE	TS						
10	DC_OM17								
11	DC_OM21								
12	DC_OM22#S								
13	DC_OM22&D								
14	DC_OM23#S								
15	DC_OM23&D								
16	DC_OM24&D								

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME	
DC-23Q2-Rev 0		Jason Stuckey		5/10/23		17:20		Jason Stuckey		5/10/23		17:20	
SAMPLER NAME AND SIGNATURE													
PRINT Name of SAMPLER: Jason Stuckey													
SIGNATURE of SAMPLER: Jason Stuckey													
DATE Signed (MM/DD/YYYY): 5/10/23													

Temp in °C	Received on	Custody Sealed (Y/N)	Samples Intact (Y/N)
3.3	5-10-23 17:20	N	Y

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: Visira Corp	Report To: Brian Voelker	Company: Visira Corp	Report To: Brian Voelker	Company: Visira Corp	Report To: Brian Voelker

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32

CHAIN-OF-CUSTODY / Analytical Request Document

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Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Visira Corp	Report To:	Brian Voelker	Attention:	Jason Stuckey
Address:	13498 E. 900th St	Copy To:	Jason Stuckey	Company Name:	Visira Corp
Email To:	Brian.Voelker@VisiraCorp.com	Purchase Order No.:		Address:	see Section A
Phone:	(217) 753-8911	Project Name:		Quote Reference:	
Requested Due Date/TAT:	10 day	Project Number:	2285	Project Manager:	
				Profile #	

Page: 1 of 9

Section D Required Client Information		Valid Matrix Codes		SAMPLE TYPE (See valid codes to left)		COLLECTED		SAMPLE TEMP AT COLLECTION		# OF CONTAINERS		Preservatives		Requested Analysis Filtered (Y/N)		Project No./ Lab I.D.	
ITEM #	SAMPLE ID (A-Z, 0-9, /, -) Sample ID's MUST BE UNIQUE	MATRIX CODE	CODE	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME
1	DC_BA01																
2	DC_BA02																
3	DC_BA02IL																
4	DC_BA03 + Dup			5/10/23	1415												
5	DC_BA03IL																
6	DC_BA04																
7	DC_BA05#																
8	DC_BA06																
9	DC_G02IL																
10	DC_G02HS																
11	DC_G02&D																
12	DC_G03IL																
13	DC_G04IL E-B 2			5/10/23	1545												
14	DC_G06IL E-B 3			5/10/23	1545												
15	DC_G06HS																
16	DC_G07IL																

ACCEPTED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME	
Joseph R. Rad		5/10/23		1720		Joseph R. Rad		5/10/23		1720		Joseph R. Rad		5/10/23		1720	
SIGNATURE OF SAMPLER:		DATE SIGNED (MM/DD/YY):		SIGNATURE OF SAMPLER:		DATE SIGNED (MM/DD/YY):		SIGNATURE OF SAMPLER:		DATE SIGNED (MM/DD/YY):		SIGNATURE OF SAMPLER:		DATE SIGNED (MM/DD/YY):		SIGNATURE OF SAMPLER:	
Joseph R. Rad		5/10/23		Joseph R. Rad		5/10/23		Joseph R. Rad		5/10/23		Joseph R. Rad		5/10/23		Joseph R. Rad	

DC-23Q2-Rev 0

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DC-257-205

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 Vm 5-12-23

Page: 1 of 9

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Section D Required Agency Information:	
Company:	Visira Corp	Report To:	Brian Voelker	Attention:	Jason Stuckey	Company Name:	Visira Corp
Address:	13498 E. 900th St	Copy To:	Jason Stuckey	Address:	see Section A	NPDES	GROUND WATER
						UST	DRINKING WATER
Email To:	Brian.Voelker@VisiraCorp.com	Purchase Order No.:		Quote Reference:		RCRA	OTHER
Phone:	(217) 753-8911	Project Name:		Project Manager:		Site Location	
Fax:		Project Number:	2285	Profile #:		STATE:	IL
Requested Due Date/TAT:		10 day					

Section D Required Client Information		Valid Matrix Codes MATRIX CODE DRINKING WATER DW WASTE WATER WW WASTE WATER P WASTE WATER S WASTE WATER L WASTE WATER G WASTE WATER O WASTE WATER A WASTE WATER T WASTE WATER I WASTE WATER F WASTE WATER C WASTE WATER B WASTE WATER N WASTE WATER Y WASTE WATER M WASTE WATER J WASTE WATER K WASTE WATER H WASTE WATER Q WASTE WATER R WASTE WATER S WASTE WATER T WASTE WATER U WASTE WATER V WASTE WATER W WASTE WATER X WASTE WATER Y WASTE WATER Z		COLLECTED		RELINQUISHED BY / AFFILIATION		ACCEPTED BY / AFFILIATION		SAMPLE CONDITIONS	
ITEM #	SAMPLE ID (A-Z, 0-9, /, -) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	Temp in °C
1	DC_BA01	WT	5/11/23	1333							5
2	DC_BA02										5
3	DC_BA02IL										5
4	DC_BA03										5
5	DC_BA03IL										5
6	DC_BA04	WT	5/11/23	1146							5
7	DC_BA05#										5
8	DC_BA06										5
9	DC_G02IL										5
10	DC_G02#S										5
11	DC_G02&D										5
12	DC_G03IL										5
13	DC_G04IL										5
14	DC_G06IL										5
15	DC_G06#S										5
16	DC_G07IL										5
ADDITIONAL COMMENTS DC-23Q2-Rev 0											

34

CHAIN-OF-CUSTODY / Analytical Request Document

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Vmw5-12-23

page: 2 of 9

Section A	Section B	Section C	Page: 2 of 9	
Required Client Information:	Required Project Information:	Invoice Information:		
Company: Visira Corp	Report To: Jason Voelker	Attention: Jason Stuckey		
Address: 13498 E. 900th St	Copy To: Jason Stuckey	Company Name: Visira Corp		
		Address: see Section A		
		Quote Reference: Project Manager Profile at:		
Email To: Brian.Voelker@VisiraCorp.com	Purchase Order No.:			
Phone: (217) 753-8911 Fax:	Project Name:			
Requested Due Date/TAT: 10 day	Project Number: 2285			
			NPDES GROUND WATER DRINKING WATER	
			UST RCRA OTHER	
			Site Location	
			STATE:	IL

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APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT, BOTTOM ASH BASIN
DC-257-205

Page: 3 of 9

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Vistra Corp	Report To:	Brian Voelker	Attention:	Jason Stuckey
Address:	13498 E. 900th St	Copy To:	Jason Stuckey	Company Name:	Vistra Corp
Email To:	Brian.Voelker@VistraCorp.com	Purchase Order No.:		Address:	see Section A
Phone:	(217) 753-8911	Project Name:		Quote Reference:	
Requested Due Date/TAT:	10 day	Project Number:	2285	Project Manager:	
				Project #:	

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOLIDS SOL OIL OL WIFE WIF AIR AIR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Y/N	Requested Analysis Filtered (Y/N)										Project No./ Lab I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	DC_267_203	DC_267_204		DC_267_206	DC_811_204	DC_846_201-202	DC_846_203	DC_846_205	DC_CLOSURE_201-202	DC_SUP_000	DC_WPCP_203-206	Residual Chlorine (Y/N)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	
DC-2302-Rev 0		<i>[Signature]</i>	5/11/23	1720	<i>[Signature]</i>	5/11/23	17:20	Temp in °C	Received on
		SAMPLER NAME AND SIGNATURE		DATE SIGNED		Custody		Sealed Cooler	Intact (Y/N)
		PRINT Name of SAMPLER:		(MM/DD/YYYY)		5/11/23		Y	Y
		SIGNATURE of SAMPLER:							

CHAIN-OF-CUSTODY / Analytical Request Document

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Required Client Information:		Required Project Information:		Invoice Information:	
Company:	Vistra Corp	Report To:	Brian Voelker	Attention:	Jason Stuckey
Address:	13498 E. 900th St	Copy To:	Jason Stuckey	Company Name:	Vistra Corp
Email To:	Brian.Voelker@VistraCorp.com	Purchase Order No.:		Address:	see Section A
Phone:	(217) 753-8911	Project Name:		Quote Reference:	
Fax:		Project Manager:		Profile #:	
Requested Due Date/TAT:	10 day	Project Number:	2285	Site Location	NPDES GROUND WATER DRINKING WATER UST RCRA OTHER
				STATE:	IL

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT, BOTTOM ASH BASIN

Section D Required Client Information		Valid Matrix Codes MATRIX CODE		SAMPLER NAME AND SIGNATURE		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS	
SAMPLE ID (A-Z, 0-9 / .) Sample IDs MUST BE UNIQUE		MATRIX CODE UNDRINKING WATER DW WATER WATER WT WASTEWATER WW INDUSTRIAL I SOLID/SOLID SL OIL OL WIFE WP AIR AR OTHER OT TISSUE TS		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE	
SAMPLE TYPE (G=GRAB C=COMP)		SAMPLE CODE (see valid codes to left)		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE	
COLLECTED		TINE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE	
1	DC_G63#S																		
2	DC_G64#L																		
3	DC_G64#S			5/11/23	1811														
4	DC_G65#L			5/11/23	1251														
5	DC_G65#S																		
6	DC_G66#L																		
7	DC_G66#S																		
8	DC_G67#L																		
9	DC_G67#S																		
10	DC_G70#L																		
11	DC_G71#L																		
12	DC_G71#S																		
13	DC_G72#L																		
14	DC_G73#L			5/11/23	1205														
15	DC_L103																		
16	DC_QM01																		

DC-23Q2-Rev 0

DATE SIGNED
05/11/23

SIGNATURE
[Signature]

CHAIN-OF-CUSTODY / Analytical Request Document

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Section C
Invoice Information:Section B
Required Project Information:Section A
Required Client Information:

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 8 of 9	
Company:	Visira Corp	Report To:	Brian Voelker	Attention:	Jason Stuckey		
Address:	13498 E. 900th St	Copy To:	Jason Stuckey	Company Name:	Visira Corp		
				Address:	see Section A		
				REGULATORY AGENCY			
				NPDES	GROUND WATER	DRINKING WATER	

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JAN 5-12-13

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT, BOTTOM ASH BASIN

DC-257-205

Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quota Reference:		UST		RCRA		OTHER	
Phone: (217) 753-8911		Project Name:		Project Manager:		Site Location		STATE:		IL	
Requested Due Date/TAT: 10 day		Project Number: 2285		Profile #:							
Section D Required Client Information		Valid Matrix Codes		COLLECTED		SAMPLE TYPE (G=GRAV C=COMP)		MATRIX CODE (see valid codes to left)		Requested Analysis Filtered (Y/N)	
SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE		MATRIX CODE		DATE		TIME		SAMPLE TEMP AT COLLECTION		Y/N	
1		DC_P39#S									
2		DC_P39&D									
3		DC_P40IL									
4		DC_P40#S									
5		DC_P41IL									
6		DC_P41#S									
7		DC_P41&D									
8		DC_P42IL									
9		DC_P42#S									
10		DC_P42&D									
11		DC_R10IL									
12		DC_R11IL									
13		DC_R13IL									
14		DC_R61IL									
15		DC_R72#S									
16		DC_I43IL									
ITEM #		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME	
1		5/11/23		10:51		graceful		5/11/23		17:20	
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE	
DC-23Q2-Rev 0		graceful		5/11/23		17:20		graceful		5/11/23	
SAMPLER NAME AND SIGNATURE		PRINT NAME of SAMPLER:		SIGNATURE of SAMPLER:		DATE SIGNED (MM/DD/YY):		Temp in °C		Received on	
graceful		graceful		graceful		05/11/23		5		5/11/23	
Sample Intact (Y/N)		Sealed Cooler (Y/N)		Custody (Y/N)		Temp in °C		Received on		Sample Intact (Y/N)	
Y		Y		Y		5		5/11/23		Y	

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Vistra Corp	Report To:	Brian Voelker	Invoice Information:	Attention:
Address:	13498 E. 900th St	Copy To:	Jason Stuckey	Company Name:	Vistra Corp
Email To:	Brian.Voelker@VistraCorp.com	Purchase Order No.:		Address:	see Section A

REGULATORY AGENCY	
NPDES	GROUND WATER
UST	RCRA
	DRINKING WATER
	OTHER

Page: 9 of 9

40

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 9

Section A

Section B

Section C

Section A Required Client Information: Company: Visira Corp Address: 13498 E. 900th St Email To: Brian.Voelker@VisiraCorp.com Phone: (217) 753-8811 Fax: Requested Due Date/TAT: 10 day		Section B Required Project Information: Report To: Brian Voelker Copy To: Jason Stuckey Purchase Order No.: Project Name: Project Number: 2285		Section C Invoice Information: Attention: Jason Stuckey Company Name: Visira Corp Address: see Section A Code Reference: Project Manager: Profile #:	
Regulatory Agency NPDES UST Site Location STATE: IL		Ground Water RCRA Drinking Water OTHER GEORGIA		Project No./ Lab I.D.	

ITEM #	Section D Required Client Information	Valid Matrix Codes MATERIAL CODE DRINKING WATER DW WASTE WATER WT PRECIPITATE P SOLID S OIL OL WIFE WP AIR AR OTHER OT TSSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test	Y/N	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	Project No./ Lab I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	DC_257_203	DC_257_204			DC_257_205	DC_811_204	DC_845_201-202	DC_845_203	DC_845_205	DC_CLOSURE_201-202	DC_SUP_000	DC_WPCP_203-206																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
DC-23Q2-Rev 0	Jason R Reed	5/12/23	14:31	Jason R Reed	5/12/23	14:31	Temp in °C: 20 Received on: 5/12/23 Sealed Cooler (Y/N): 2 Samples Intact (Y/N): 20

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	DATE Signed (MM/DD/YYYY):
SIGNATURE of SAMPLER:	

CHAIN-OF-CUSTODY / Analytical Request Document

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT, BOTTOM ASH BASIN

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

Page: 2 of 9

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Visira Corp	Report To:	Brian Voelker	Attention:	Jason Stuckey
Address:	13498 E. 900th St	Copy To:	Jason Stuckey	Company Name:	Visira Corp
				Address:	see Section A
Email To:	Brian.Voelker@VisiraCorp.com	Purchase Order No.:		Quote Reference:	
Phone:	(217) 753-8911	Project Name:		Project Manager:	
Requested Due Date/TAT:	10 day	Project Number:	2285	Profile #:	

Section D Required Client Information		Valid Matrix Codes		Matrix Code		Sample Type (G=GRAB C=COMP)		Collected		Preservatives		Requested Analysis Filtered (Y/N)		Project No./Lab I.D.	
Item #	Sample ID (A-Z, 0-9 / -) Sample IDs must be unique	MATRIX	CODE	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₈	Methanol	Other
1	DC_G081L														
2	DC_G091L														
3	DC_G121L														
4	DC_G12#S														
5	DC_G141L														
6	DC_G151L														
7	DC_G161L														
8	DC_G501L														
9	DC_G50#S														
10	DC_G511L														
11	DC_G51#S														
12	DC_G521L														
13	DC_G52#S														
14	DC_G531L														
15	DC_G53#S														
16	DC_G541L														

Section E Additional Comments		Section F Relinquished By / Affiliation		Section G Date		Section H Time		Section I Accepted By / Affiliation		Section J Date		Section K Time		Section L Sample Conditions	
DC-23Q2-Rev 0		Joseph R. Reed		5/12/23		12:20		Joseph R. Reed		5/12/23		14:31		2	
SAMPLER NAME AND SIGNATURE		PRINT NAME OF SAMPLER:		SIGNATURE OF SAMPLER:		DATE SIGNED (MM/DD/YYYY):		RECEIVED ON		TEMP IN °C		ICE (Y/N)		CUSTODY	
Joseph R. Reed		Joseph R. Reed		Joseph R. Reed		5/12/23		5/12/23		14:31		2		1	

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Vistra Corp	Report To:	Brian Voelker	Attention:	Jason Stuckey
Address:	13498 E. 900th St	Copy To:	Jason Stuckey	Company Name:	Vistra Corp
Email To:	Brian.Voelker@VistraCorp.com	Purchase Order No.:		Address:	see Section A
Phone:	(217) 753-8911	Project Name:		Quote Reference:	
	Fax:	Requested Due Date/TAT:	10 day	Project Manager:	
				Profile #:	

Section D Required Client Information		Valid Matrix Codes		Matrix Code (see valid codes to left)		Sample Temp at Collection		Preservatives		Requested Analysis Filtered (Y/N)		Project No./ Lab ID.	
ITEM #	SAMPLE ID (A-Z, 0-9 / -)	MATRIX	CODE	SAMPLE CODE	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME						
1	68-23	DC_G54#S	FH dup			5/12/23	1304						
2		DC_G55IL											
3		DC_G55#S											
4		DC_G56IL											
5		DC_G56#S											
6		DC_G57IL											
7		DC_G57#S											
8		DC_G58IL											
9		DC_G58#S											
10		DC_G59IL											
11		DC_G59#S											
12		DC_G60IL				5/12/23	1048						
13		DC_G60#S				5/12/23	1100						
14		DC_G61#S											
15		DC_G62IL											
16		DC_G63IL											

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
DC-23Q2-Rev 0		Joseph R. Reed	5/12/23	1431	grace	5/12/23	14:31	Temp in °C Received on (Y/N) Custody Sealed (Y/N) Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE		DATE SIGNED (MM/DD/YY)
PRINT Name of SAMPLER:	Joseph R. Reed	5/12/23
SIGNATURE of SAMPLER:		

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Vistra Corp	Report To:	Brian Voelker	Attention:	Jason Stuckey
Address:	13498 E. 900th St	Copy To:	Jason Stuckey	Company Name:	Vistra Corp
				Address:	see Section A

Project Name:		Project Number: 2285		Requested Due Date/TAT: 10 day		Phone: (217) 753-9811 Fax:		Project Manager: Profile #:		Site Location STATE: IL		DC-257-205	
Section D Required Client Information		Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOLID S SLURRY SL WPE WP AIR AR OTHER OT TISSUE TS		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ O ₂ Methanol Other	Y/N	Requested Analysis Filtered (Y/N)		Residual Chlorine (Y/N)
ITEM #						DATE	TIME						Project No./ Lab I.D.
1	DC_T44/L												
2	DC_T45/L												
3	DC_T46/L												
4	DC_X301_leachate												
5	EB-6					5/6/23	1036	5					
6	EB-7					5/12/23	1245	12					
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS	
DC-23Q2-Rev 0		Joseph R Red		5/12/23		14:31		Joseph R Red		5/12/23		14:31		Received on Ice (Y/N) Custody Sealed Cooler (Y/N) Samples Intact (Y/N)	
		Signature of Sampler:		PRINT Name of Sampler:		SIGNATURE AND SIGNATURE		DATE Signed (MM/DD/YYYY):							

GEO2997
vmmw 5-16-23

Invoice Information:

Profile #: _____

STATE: IL

Samples	Intact (Y/N)
1	
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46

GEO2997
vms 5-16-23

Page: 2 of 9

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		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test ↓ Analysis Test ↓ Y/N ↓	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	Project No./ Lab I.D.
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	DC_257_203	DC_257_204		DC_257_205	DC_811_204	DC_845_201-202	DC_845_203	DC_845_205	DC_CLOSURE_201-202	DC_SUP_000	DC_WPCP_203-206				
1	DC_G08!L																														
2	DC_G09!L																														
3	DC_G12!L																														
4	DC_G12#S																														
5	DC_G14!L																														
6	DC_G15!L																														
7	DC_G16!L																														
8	DC_G50!L																														
9	DC_G50#S				5/15/23	1256		12																							
10	DC_G51!L																														
11	DC_G51#S				5/15/23	1126		12																							
12	DC_G52!L																														
13	DC_G52#S																														
14	DC_G53!L																														
15	DC_G53#S																														
16	DC_G54!L																														
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	SAMPLE CONDITIONS																					
DC-23Q2-Rev 0		Jal R Reed		5/15/23	1800	Vann Wynne		5-16-23	650	0.3		Y	N	Y																	
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:										DATE Signed (MM/DD/YY):																					
SIGNATURE of SAMPLER:										5/15/23																					

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Section A DC-257-205
Required Client Information:

GEO2997
vnuw 5-16-23

Page: 3 of 5

Section B
Required Project Information:

Section C
Invoice Information:

Company: Vistra Corp		Report To: Brian Voelker		Attention: Jason Stuckey		Page: 3 of 9	
Address: 13498 E. 900th St		Copy To: Jason Stuckey		Company Name: Vistra Corp		REGULATORY AGENCY	
				Address: see Section A			
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Quote Reference:		NPDES GROUND WATER DRINKING WATER	
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:		UST RCRA OTHER	
Requested Due Date/TAT: 10 day		Project Number: 2285		Profile #:		Site Location	
						STATE: IL	

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOL/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		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test ↑ Y/N ↓	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	Project No./ Lab I.D.
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		DC_257_203	DC_257_204	DC_257_205	DC_811_204	DC_845_201-202	DC_845_203	DC_845_205	DC_CLOSURE_201-202	DC_SUP_000	DC_WPCP_203-206		
1		DC_G54#S																											
2		DC_G55!L																											
3		DC_G55#S																											
4		DC_G56!L																											
5		DC_G56#S																											
6		DC_G57!L																											
7		DC_G57#S																											
8		DC_G58!L																											
9		DC_G58#S																											
10		DC_G59!L			5/15/23	1552		10																					
11		DC_G59#S																											
12		DC_G60!L																											
13		DC_G60#S																											
14		DC_G61#S																											
15		DC_G62!L FB #8			5/15/23	1750		10																					
16		DC_G68!L FB #9			5/15/23	1730		12																					
ADDITIONAL COMMENTS					RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	SAMPLE CONDITIONS																
DC-23Q2-Rev 0					<i>[Signature]</i>		5/15/23	1800	<i>Vann Wagner</i>		5/16/23	650	0.3	Y	N	Y													
SAMPLER NAME AND SIGNATURE								PRINT Name of SAMPLER:		SIGNATURE of SAMPLER:		DATE Signed (MM/DDYY):		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)												
								<i>Tal Reed</i>		<i>[Signature]</i>		5/15/23																	

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Section A

Section B

Section C

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT, BOTTOM ASH BASIN

GEO2997
vmw 5-16-23

Required Client Information:
DC-237-205

Required Project Information:

Invoice Information:

Company: Vistra Corp		Report To: Brian Voelker		Attention: Jason Stuckey	
Address: 13498 E. 900th St		Copy To: Jason Stuckey		Company Name: Vistra Corp	
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.:		Address: see Section A	
Phone: (217) 753-8911 Fax:		Project Name:		Quote Reference:	
Requested Due Date/TAT: 10 day		Project Number: 2285		Project Manager:	
				Profile #:	

REGULATORY AGENCY		
NPDES	GROUND WATER	DRINKING WATER
UST	RCRA	OTHER
Site Location	IL	
STATE:		

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		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test ↓ Y/N	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	Project No./ Lab I.D.
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	DC_257_203	DC_257_204		DC_257_205	DC_811_204	DC_845_201-202	DC_845_203	DC_845_205	DC_CLOSURE_201-202	DC_SUP_000	DC_WPCP_203-206				
1	DC_G63#S																														
2	DC_G64#L				5/15/23	1500		12																							
3	DC_G64#S																														
4	DC_G65#L																														
5	DC_G65#S																														
6	DC_G66#L																														
7	DC_G66#S																														
8	DC_G67#L																														
9	DC_G67#S																														
10	DC_G70#L																														
11	DC_G71#L																														
12	DC_G71#S																														
13	DC_G72#L																														
14	DC_G73#L																														
15	DC_L103																														
16	DC_OM01																														

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
DC-23Q2-Rev 0	Joseph R. Reed	5/15/23	1800	Vanna Wapner	5-16-23	650	0.3	Y	N	Y

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER:		DATE Signed (MM/DD/YY):	
SIGNATURE of SAMPLER:		5/15/23	

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

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Section A
Required Client Information:

Section B
Required Project Information:

Section C
Invoice Information:

Page: 5 of 9

GEO2997
vnuw 5-16-23

ITEM #	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	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test Y/N	Requested Analysis Filtered (Y/N)												Residual Chlorine (Y/N)	Project No./ Lab I.D.
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		DC_257_203	DC_257_204	DC_257_205	DC_811_204	DC_845_201-202	DC_845_203	DC_845_205	DC_CLOSURE_201-202	DC_SUP_000	DC_WPCP_203-206				
1	DC_OM04#S																														
2	DC_OM05#S																														
3	DC_OM07																														
4	DC_OM08																														
5	DC_OM09																														
6	DC_OM10					5/13/23	1314		10																						
7	DC_OM12					5/13/23	1405		11																						
8	DC_OM15																														
9	DC_OM16																														
10	DC_OM17																														
11	DC_OM21					5/13/23	1324		10																						
12	DC_OM22#S																														
13	DC_OM22&D																														
14	DC_OM23#S																														
15	DC_OM23&D					5/13/23	1600		10																						
16	DC_OM24&D																														
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION				DATE	TIME	ACCEPTED BY / AFFILIATION				DATE	TIME	SAMPLE CONDITIONS																	
DC-23Q2-Rev 0		Joseph R. Raul				5/13/23	1800	[Signature]				5-16-23	1650	0.3 Y N Y																	

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:	Sol Rold				
SIGNATURE of SAMPLER:	DATE Signed (MM/DD/YY): 5/15/23				

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

Page: 6 of 9

GEO2997
Vmw 5-16-23

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		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test Y/N	Requested Analysis Filtered (Y/N)												Residual Chlorine (Y/N)	Project No./ Lab I.D.
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other		DC_257_203	DC_257_204	DC_257_205	DC_811_204	DC_845_201-202	DC_845_203	DC_845_205	DC_CLOSURE_201-202	DC_SUP_000	DC_WPCP_203-206				
1	DC_OM25#S																														
2	DC_OM25&D																														
3	DC_OR02																														
4	DC_OR03#S																														
5	DC_OR03&D																														
6	DC_OR04&D																														
7	DC_OR05&D																														
8	DC_OR06!A																														
9	DC_OR11				5/13/23	1233		11																							
10	DC_OR13#S																														
11	DC_OR13&D																														
12	DC_OR14#S																														
13	DC_OR14&D				5/15/23	1135		11																							
14	DC_OR18																														
15	DC_OR19				5/15/23	1528		11																							
16	DC_OR20				5/15/23	1110		11																							
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION				DATE	TIME	ACCEPTED BY / AFFILIATION				DATE	TIME	SAMPLE CONDITIONS																	
DC-23Q2-Rev 0		Joe [Signature]				5/15/23	1800	Van [Signature]				5-16-23	650	a3 Y N Y																	

CHAIN-OF-CUSTODY / Analytical Request Document

REGULATORY AGENCY 51

WELL/SAMPLE POINT **BA01** *JR* Purge Method: B ladder
Date: 5/10/23 *JR* Start Time: 1100 *1220* Finish/Sample Time: 1333
Well Depth (Bottom) From MP: 1468 *prop* ft Min. Purge Volume: 1.0 Gal / L
Depth to Water From MP: 1468 ft Total Purge Volume: 1.3 Gal / L
Water Column Length: _____ ft Max Drawdown: _____ ft
Well Water Volume: _____ Gal / L Total Drawdown: 0.07 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1233	14.75	100	6.82	791	18.04	63	1.42	7.0
2	1234	14.75	100	6.80	793	18.00	60	1.34	10.3
3	1235	14.75	100	6.79	796	18.01	58	1.25	9.9
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)
3	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) <u>1000mL</u>
1	<u>2.5L HNO3</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 250mL) <u>1000mL</u>
3	<u>TOC</u>

Comments: S/N 21615637 *JR* Final DTW: 14.75 ft
21615533 Dis. Iron = 0.841 *uL*

Sampler's Signature: Joseph R Red

WELL/SAMPLE POINT **BA02**

Purge Method: **Bladder / Low Flow**

Date: **5/15/23** Start Time: **1011** Finish/Sample Time: **1123**

Well Depth (Bottom) From MP: **PUMP** ft Min. Purge Volume: **1.0** Gal **L**

Depth to Water From MP: **JR 8.05** ft **8.39** Total Purge Volume: **1.3** Gal / L

Water Column Length: **NA** ft Max Drawdown: **<** ft

Well Water Volume: **1** Gal / L Total Drawdown: **2.96** ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1032	10.03	100	7.36	909	14.1	229	1.01	14.7
2	1033	10.05	100	7.30	899	14.20	229	0.92	12.8
3	1034	10.07	100	7.30	897	14.20	228	0.90	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	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
3	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL, 1000mL)
1	2.5 L HNO ₃

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 250 mL, 1000mL)
3	TOC 40mL

Final DTW: **11.35** ft

Comments **JR 5/15/23 21615636**

Dis Iron²⁺ = 0.502 ppm

Sampler's Signature: **Joseph R Reed**

Duck Creek

WELL/SAMPLE POINT BA02L

Purge Method: Low Flow

Date: 5/10/23 Start Time: 1255 Finish/Sample Time: 1415

Well Depth (Bottom) From MP: 11.46 ft Min. Purge Volume: 1 Gal (D)
Depth to Water From MP: 7.91 ft Total Purge Volume: 1.3 Gal (D)
Water Column Length: 3.55 ft Max Drawdown: ~ ft
Well Water Volume: 2.15 Gal (D) Total Drawdown: 1.55 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	1308	8.96	100	7.11	575.5	12.71	-119.6	0.34	101.23
2	1309	9.05	100	7.12	581.00	12.63	-120.8	0.32	114.09
3	1310	9.05	100	7.12	582.96	12.58	-121.8	0.30	99.10
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

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

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

BOTTLE INFORMATION:

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

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 250mL) 1L
3	TOC (A,V 40mL, H2SO4)

Final DTW: 9.46 ft

Comments Transducer: 21615682

Dissolved iron: OVERTON (Sample was deep red)

Sampler's Signature: Brenda J. Jones

WELL/SAMPLE POINT **BA03**

Purge Method: Bladder / Low Flow

Date: 5/10/23 Start Time: 1100 Finish/Sample Time: 1300

Well Depth (Bottom) From MP: pump ft Min. Purge Volume: 1.0 Gal / L

Depth to Water From MP: 6.11 ft Total Purge Volume: 1.3 Gal / L

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: 0.69 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	1110	6.20	100	6.71	813	15.48	226	5.24	37.1
2	1111	6.21	100	6.71	820	15.49	226	5.15	44.8
3	1112	6.21	100	6.69	819	15.41	225	4.99	42.0
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)
<u>563P</u>	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
<u>1+1</u>	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
<u>H1</u>	General (P, 250 mL) <u>1000mL</u>
<u>1+1</u>	<u>2.5L HNO3</u>

Filtered	
Qty	Bottles
<u>1+1</u>	Metals (P,250mL, HNO3)
<u>JR</u>	Ammonia (P,250mL, H2SO4)
<u>1+1</u>	General (P,500mL)
<u>3+3</u>	<u>TOC</u>

Final DTW: 6.80 ft

Comments S/N 21615637

DIS Iron - 0.076 ppm
Dup. taken here

Sampler's Signature: Joseph R. Karl

WELL/SAMPLE POINT BA03 + FD

Purge Method: Dedicate pump

Date: 5/16/2023 Start Time: 1351 Finish/Sample Time: 1423

Well Depth (Bottom) From MP: 0ump ft Min. Purge Volume: 1000 Gal / L ML
Depth to Water From MP: 6.84 ft Total Purge Volume: 1000 Gal / L ML
Water Column Length: - ft Max Drawdown: - ft
Well Water Volume: - Gal / L Total Drawdown: 0.26 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	1412	7.04	100	7.06	739	22.84	154	2.09	0.0
2	1414	7.05	100	7.02	740	22.79	153	1.40	0.0
3	1416	7.07	100	7.01	741	22.67	152	1.36	0.0
4	1418	7.08	100	6.99	741	22.60	150	1.33	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)
	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1 + 1 FD	General (P, 250 mL) 150 mL

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

Final DTW: 7.10 ft

Comments Transducer S/N 21615637 Resample
FD Filled here

Sampler's Signature: [Signature]

WELL/SAMPLE POINT **BA03L**

Purge Method: Bladder / Low Flow

Date: 5/10/23 Start Time: 1315 Finish/Sample Time: 1415

Well Depth (Bottom) From MP: 14.4 ft Min. Purge Volume: 1.0 Gal / L

Depth to Water From MP: 5.73 ft Total Purge Volume: 1.3 Gal / L

Water Column Length: NA ft Max Drawdown: 0.16 ft

Well Water Volume: NA Gal / L Total Drawdown: 0.16 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1325	5.89	100	6.65	1390	15.05	222	2.77	61.1
2	1326	5.89	100	6.64	1380	15.01	226	2.76	57.3
3	1327	5.89	100	6.65	1380	15.03	221	2.71	50.0
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)
3	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) 1000mL
1	HNO ₃ 2.5L

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 250 mL) 1000mL
3	TAC 40mL

Final DTW: 5.89 ft

Comments S/N 214 15687

Dis Iron^{tr} - 0.068 ppm

Sampler's Signature: Joseph R Reed

Duck Creek

WELL/SAMPLE POINT BA03L

Purge Method: Dedicated pump

Date: 5/16/2023

Start Time: 1423

Finish/Sample Time: 1446

g56-1323

Well Depth (Bottom) From MP: pump ft

Min. Purge Volume: 1000 Gal / L ML

Depth to Water From MP: 6.55 ft

Total Purge Volume: 1000 Gal / L ML

Water Column Length: 0 ft

Max Drawdown: 0 ft

Well Water Volume: 0 Gal / L

Total Drawdown: 0.20 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	1437	6.75	100	6.83	1500	14.31	175	2.70	12.0
2	1439	6.75	100	6.82	1480	14.35	175	2.66	9.7
3	1441	6.75	100	6.81	1490	14.27	175	2.62	10.2
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Hori6a

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)
	Phenois (A,G,250mL, H2SO4)
1	General (P, 250mL) 150mL

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

Final DTW: 6.75 ft

Comments Transducer S/N 21615687 Resample

Sampler's Signature: [Signature]

WELL/SAMPLE POINT **BA04**

Purge Method: Bladder/low flow

Date: 5/1/23 Start Time: 1035 Finish/Sample Time: 1140

Well Depth (Bottom) From MP: pump ft Min. Purge Volume: 1.0 Gal L

Depth to Water From MP: 5.39 ft Total Purge Volume: 1.3 Gal L

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: 0.08 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	1050	5.42	100	6.77	937	17.70	176	1.10	0.0
2	1051	5.42	100	6.75	942	17.60	177	1.13	0.0
3	1052	5.42	100	6.75	942	17.55	178	1.05	
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

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

Filtered	
Qty	Bottles
1	Metals (P, 250mL, HNO3)
	Ammonia (P, 250mL, H2SO4)
1	General (P, 250 mL) <u>1000mL</u>
3	<u>TOC 40mL</u>

Final DTW: 5.47 ft

Comments S/n 21615631

Dis. Iron⁺² = Under Range

Sampler's Signature: Joseph R Rad

WELL/SAMPLE POINT **BA05**

Purge Method: Bladder / low flow

Date: 5/12/23 Start Time: 950 Finish/Sample Time: 1050
Well Depth (Bottom) From MP: Pump ft Min. Purge Volume: 1.0 Gal / L
Depth to Water From MP: 18.13 ft Total Purge Volume: 1.3 Gal 10
Water Column Length: _____ ft Max Drawdown: _____ ft
Well Water Volume: _____ Gal / L Total Drawdown: 3.47 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1002	19.35	100	7.00	1550	16.33	19	3.21	591
2	1003	19.61	100	6.99	1560	16.30	13	3.05	700
3	1004	19.85	100	6.96	1560	16.29	1	2.99	768
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☐ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☒ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
3	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) 1000mL
1	2.5 L HNO ₃

(11)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 250 mL) 1000mL
3	TOC 40 mL

Final DTW: 21.60 ft

Comments S/n - 21615540

Dis. Iron⁺² = 4.531 ppm

Sampler's Signature: Joseph R Reed

Duck Creek

WELL/SAMPLE POINT **BA06**

Purge Method:

Bladder / Low Flow

Date: 5/12/23 Start Time: 1110 Finish/Sample Time: 1219

Well Depth (Bottom) From MP: pump ft Min. Purge Volume: 1.0 Gal ☒ L

Depth to Water From MP: 2170 ft Total Purge Volume: 1.3 Gal ☒ L

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: 5.85 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	1130	2390	100	6.45	2940	1582	-32	0.99	55.6
2	1131	2430	100	6.45	2930	1571	-36	0.89	53.2
3	1132	2455	100	6.44	2930	1568	-39	0.82	55.1
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)
3	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) 1000mL
1	2.5L HNO3

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P, 250 mL) 1000mL
3	TOC 40mL

Final DTW: 27.55 ft

Comments S/N - 21615525

Dis. Iron = Over Range

Sampler's Signature:

Joseph R Red

Multiparameter Meter Field Calibration Checklist									
Field Personnel: <i>Arnon Runkelton</i>				Location: <i>Duck Creek</i>					
Weather: <i>67°-78° Sunny Wind SE 9 mph</i>				Environment: <i>grass, dirt, trees</i>					
Multiparameter Water Meter		Make: <i>AT</i>	Model: <i>600</i>	Serial Number: <i>762193</i>					
Water Level Meter		Make: <i>Hero</i>	Model: <i>Digust</i>	Serial Number: <i>3217-T</i>					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<i>4.08</i>	s.u.	±0.1 s.u.	<i>P</i>	<i>NO</i>	<i>N/A</i>	MSI	L344-09	12/14/2023
pH 7.00a	<i>7.01</i>	s.u.	±0.1 s.u.	<i>P</i>	<i>I</i>	<i>I</i>	MSI	L343-07	12/9/2023
pH 10.00a	<i>10.01</i>	s.u.	±0.1 s.u.	<i>I</i>	<i>I</i>	<i>I</i>	MSI	M082-04	3/25/2024
SC Zero (DI)	<i>19.83</i>	µS/cm	0-25 µS/cm	<i>I</i>	<i>I</i>	<i>I</i>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<i>1995.5</i>	µS/cm	±5%	<i>I</i>	<i>I</i>	<i>I</i>	Geotech	2GE1442	May-23
ORP	<i>224.6</i>	mV	±15 mV	<i>I</i>	<i>I</i>	<i>I</i>	InSitu	2G1762	Jun-23
DO (Zero pt)	<i>0.09</i>	mg/L	±0.1	<i>I</i>	<i>I</i>	<i>I</i>	Macron	#000228049	8/26/2025
DO (Saturated)	<i>99.87</i>	%	97-100%	<i>I</i>	<i>I</i>	<i>I</i>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<i>0.00</i>	NTU	<2 NTU	<i>I</i>	<i>I</i>	<i>I</i>	Pace Labs	N/A (DI)	N/A (DI)
Approx. every 4 hrs, unless only one well									
ICV (Initial Calibration Verification)					Time: <i>0942</i>				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<i>4.00</i>	s.u.	±0.15 s.u.	<i>P</i>	<i>N/A</i>	Geotech	2GE870	Mar-24	
pH 7.00b	<i>6.83</i>	s.u.	±0.15 s.u.	<i>I</i>	<i>I</i>	Geotech	2GC931	Mar-24	
pH 10.00b	<i>10.67</i>	s.u.	±0.15 s.u.	<i>I</i>	<i>I</i>	Geotech	2GE820	May-24	
SC 1000	<i>1005.2</i>	µS/cm	±5%	<i>I</i>	<i>I</i>	Ricca	4207N97	Jul-24	
Approx. every 4 hrs, unless only one well									
CCV (Continued Calibration Verification):					Time: <i>1539</i>				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<i>4.03</i>	s.u.	±0.1 s.u.	<i>P</i>	<i>NO</i>	<i>N/A</i>	MSI	L344-09	12/14/2023
pH 7.00a	<i>7.00</i>	s.u.	±0.1 s.u.	<i>I</i>	<i>I</i>	<i>I</i>	MSI	L343-07	12/9/2023
pH 10.00a	<i>10.06</i>	s.u.	±0.1 s.u.	<i>I</i>	<i>I</i>	<i>I</i>	MSI	M082-04	3/25/2024
SC 1000	<i>1002.7</i>	µS/cm	±5%	<i>I</i>	<i>I</i>	<i>I</i>	Ricca	4207N97	Jul-24
DO (Zero pt)	<i>0.09</i>	mg/L	±0.1 mg/L	<i>I</i>	<i>I</i>	<i>I</i>	Macron	#000228049	8/26/2025
Turbidity (DI)	<i>0.00</i>	NTU	<2 NTU	<i>I</i>	<i>I</i>	<i>I</i>	Pace Labs	N/A (DI)	N/A (DI)
Approx. every 4 hrs, unless only one well									
CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L344-09	12/14/2023
7.00a		s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
10.00a		s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000		µS/cm	±5%				Ricca	4207N97	Jul-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: <i>[Signature]</i>					Date: <i>5/10/2023</i>				

Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Brendan Galenron</u>			Location: <u>Duck Creek</u>		
Weather: <u>64° Mostly Cloudy 8mph NW</u>			Environment: <u>Grass Field</u>		
Multiparameter Water Meter	Make: <u>AT</u>	Model: <u>600</u>	Serial Number: <u>762215</u>		
Water Level Meter	Make: <u>Heron</u>	Model: <u>200 ft.</u>	Serial Number: <u>19FF2111 92HB</u>		

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>8.93</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	L344-09	12/14/2023
pH 7.00a	<u>6.96</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	L343-07	12/9/2023
pH 10.00a	<u>9.97</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	M082-04	3/25/2024
SC Zero (DI)	<u>16.21</u>	µS/cm	0<25 µS/cm	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>1916.5</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Geotech	2GE1442	May-23
ORP	<u>234.6</u>	mV	±15 mV	<u>I</u>	<u>I</u>	<u>I</u>	InSitu	2G1762	Jun-23
DO (Zero pt)	<u>0.10</u>	mg/L	±0.1	<u>I</u>	<u>I</u>	<u>I</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>98.81</u>	%	97-100%	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.00</u>	NTU	<2 NTU	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: <u>0910</u>
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
pH 4.00b	<u>8.89</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>
pH 7.00b	<u>6.86</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>
pH 10.00b	<u>9.85</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>
SC 1000	<u>993.41</u>	µS/cm	±5%	<u>I</u>	<u>I</u>

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00b	<u>8.89</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	Geotech	2GE870	Mar-24
pH 7.00b	<u>6.86</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	Geotech	2GC931	Mar-24
pH 10.00b	<u>9.85</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	Geotech	2GE820	May-24
SC 1000	<u>993.41</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Ricca	4207N97	Jul-24

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: <u>1500</u>
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
pH 4.00a	<u>8.97</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>
pH 7.00a	<u>6.96</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>
pH 10.00a	<u>9.91</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>
SC 1000	<u>1016.21</u>	µS/cm	±5%	<u>I</u>	<u>I</u>
DO (Zero pt)	<u>0.10</u>	mg/L	±0.1 mg/L	<u>I</u>	<u>I</u>
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>I</u>	<u>I</u>

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>8.97</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	L344-09	12/14/2023
pH 7.00a	<u>6.96</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	L343-07	12/9/2023
pH 10.00a	<u>9.91</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	M082-04	3/25/2024
SC 1000	<u>1016.21</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Ricca	4207N97	Jul-24
DO (Zero pt)	<u>0.10</u>	mg/L	±0.1 mg/L	<u>I</u>	<u>I</u>	<u>I</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4.00a		s.u.	±0.1 s.u.		
7.00a		s.u.	±0.1 s.u.		
10.00a		s.u.	±0.1 s.u.		
SC 1000		µS/cm	±5%		
DO (Zero pt)		mg/L	±0.1 mg/L		
Turbidity (DI)		NTU	<2 NTU		

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L344-09	12/14/2023
7.00a		s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
10.00a		s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000		µS/cm	±5%				Ricca	4207N97	Jul-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: <u>Brendan Galenron</u>	Date: <u>5/10/23</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: JD				Location: V. str. Duck Creek					
Weather: 70-79°F sunny wind ESE 9-16 mph				Environment: woods					
Multiparameter Water Meter		Make: Hanna	Model: U-5000	Serial Number: V401FVTF					
Water Level Meter		Make: Hanna	Model: D'aper-T	Serial Number: 19FF2202131ML					
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	NA	MSI	L344-09	12/14/2023
pH 7.00a	6.91	s.u.	±0.1 s.u.	I	I	I	MSI	L343-07	12/9/2023
pH 10.00a	9.98	s.u.	±0.1 s.u.	I	I	I	MSI	M082-04	3/25/2024
SC Zero (DI)	9	µS/cm	0<25 µS/cm	I	I	I	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2090	µS/cm	±5%	I	I	I	Geotech	2GE1442	May-23
ORP	232	mV	±15 mV	I	I	I	InSitu	2G1762	Jun-23
DO (Zero pt)	0.08	mg/L	±0.1	I	I	I	Macron	#000228049	8/26/2025
DO (Saturated)	98.28	%	97-100%	I	I	I	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	18	NTU	<2 NTU	Fail	Yes	0.0	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: 1021			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	3.99	s.u.	±0.15 s.u.	pass	NA	Geotech	2GE870	Mar-24	
pH 7.00b	6.98	s.u.	±0.15 s.u.	I	I	Geotech	2GC931	Mar-24	
pH 10.00b	9.92	s.u.	±0.15 s.u.	I	I	Geotech	2GE820	May-24	
SC 1000	798	µS/cm	±5%	Fail	cal. by H.	Ricca	4207N97	Jul-24	

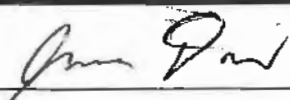
Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: 1550			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.10	s.u.	±0.1 s.u.	pass	No	NA	MSI	L344-09	12/14/2023
pH 7.00a	7.03	s.u.	±0.1 s.u.	I	I	I	MSI	L343-07	12/9/2023
pH 10.00a	9.98	s.u.	±0.1 s.u.	I	I	I	MSI	M082-04	3/25/2024
SC 1000	1040	µS/cm	±5%	I	I	I	Ricca	4207N97	Jul-24
DO (Zero pt)	0.09	mg/L	±0.1 mg/L	I	I	I	Macron	#000228049	8/26/2025
Turbidity (DI)	0.00	NTU	<2 NTU	I	I	I	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L344-09	12/14/2023
7.00a		s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
10.00a		s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000		µS/cm	±5%				Ricca	4207N97	Jul-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: 5/10/23
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Multiparameter Meter Field Calibration Checklist

Field Personnel: Kyle LANE				Location: Duck Creek					
Weather: 55° to 81° Sunny				Environment: Dry					
Multiparameter Water Meter		Make: HANNA	Model: V-5000	Serial Number: YL9KJ9 HIA					
Water Level Meter		Make: HANNA	Model: WaterPro	Serial Number: 11FF2209305 ML					

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/A	N/A	MSI	L344-09	12/14/2023
pH 7.00a	7.01	s.u.	±0.1 s.u.	P	N/A	N/A	MSI	L343-07	12/9/2023
pH 10.00a	9.98	s.u.	±0.1 s.u.	P	N/A	N/A	MSI	M082-04	3/25/2024
SC Zero (DI)	10.60	µS/cm	0<25 µS/cm	P	N/A	N/A	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2.010	µS/cm	±5%	P	N/A	N/A	Geotech	2GE1442	May-23
ORP	218	mV	±15 mV	P	N/A	N/A	InSitu	2G1762	Jun-23
DO (Zero pt)	0.89	mg/L	±0.1	P	N/A	N/A	Macron	#000228049	8/26/2025
DO (Saturated)	99.40	%	97-100%	P	N/A	N/A	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.00	NTU	<2 NTU	P	N/A	N/A	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: 10:04			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.00	s.u.	±0.15 s.u.	P	N/A	Geotech	2GE870	Mar-24	
pH 7.00b	6.91	s.u.	±0.15 s.u.	P	N/A	Geotech	2GC931	Mar-24	
pH 10.00b	9.87	s.u.	±0.15 s.u.	P	N/A	Geotech	2GE820	May-24	
SC 1000	1030	µS/cm	±5%	P	N/A	Ricca	4207N97	Jul-24	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: N/A			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a		s.u.	±0.1 s.u.				MSI	L344-09	12/14/2023
pH 7.00a		s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
pH 10.00a		s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000		µS/cm	±5%				Ricca	4207N97	Jul-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)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: 15:48			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a	4.02	s.u.	±0.1 s.u.	P	N/A	N/A	MSI	L344-09	12/14/2023
7.00a	6.93	s.u.	±0.1 s.u.	P	N/A	N/A	MSI	L343-07	12/9/2023
10.00a	9.98	s.u.	±0.1 s.u.	P	N/A	N/A	MSI	M082-04	3/25/2024
SC 1000	1060	µS/cm	±5%	P	N/A	N/A	Ricca	4207N97	Jul-24
DO (Zero pt)	0.07	mg/L	±0.1 mg/L	P	N/A	N/A	Macron	#000228049	8/26/2025
Turbidity (DI)	0.50	NTU	<2 NTU	P	N/A	N/A	Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: [Signature]	Date: 5-10-2023
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Multiparameter Meter Field Calibration Checklist

Field Personnel:	Joe Reed			Location:	Duck Creek				
Weather:				Environment:					
Multiparameter Water Meter	Make:	Horiba	Model:	u5000	Serial Number:	PW2GYJD3			
Water Level Meter	Make:	Solinst	Model:	101	Serial Number:	P7/LM2			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.00	s.u.	±0.1 s.u.	P	N		MSI	L344-09	12/14/2023
pH 7.00a	6.98	s.u.	±0.1 s.u.	P	N		MSI	L343-07	12/9/2023
pH 10.00a	9.99	s.u.	±0.1 s.u.	P	N		MSI	M082-04	3/25/2024
SC Zero (DI)	0.0	µS/cm	0<25 µS/cm	P	N		Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2010	µS/cm	±5%	P	N		Geotech	2GE1442	May-23
ORP	239	mV	±15 mV	P	N		InSitu	2G1762	Jun-23
DO (Zero pt)	0.05	mg/L	±0.1	P	N		Macron	#000228049	8/26/2025
DO (Saturated)	98.7	%	97-100%	P	N		Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.1	NTU	<2 NTU	P	N		Pace Labs	N/A (DI)	N/A (DI)
Approx. every 4 hrs, unless only one well									
ICV (Initial Calibration Verification)					Time: 1000				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.01	s.u.	±0.15 s.u.	P	N	Geotech	2GE870	Mar-24	
pH 7.00b	6.99	s.u.	±0.15 s.u.	P	N	Geotech	2GC931	Mar-24	
pH 10.00b	9.95	s.u.	±0.15 s.u.	P	N	Geotech	2GE820	May-24	
SC 1000	990	µS/cm	±5%	P	N	Ricca	4207N97	Jul-24	
Approx. every 4 hrs, unless only one well									
CCV (Continued Calibration Verification):					Time: 1509				
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		MSI	L344-09	12/14/2023
pH 7.00a	7.00	s.u.	±0.1 s.u.	P	N		MSI	L343-07	12/9/2023
pH 10.00a	9.99	s.u.	±0.1 s.u.	P	N		MSI	M082-04	3/25/2024
SC 1000	1020	µS/cm	±5%	P	N		Ricca	4207N97	Jul-24
DO (Zero pt)	0.05	mg/L	±0.1 mg/L	P	N		Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	P	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	L344-09	12/14/2023
7.00a		s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
10.00a		s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000		µS/cm	±5%				Ricca	4207N97	Jul-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:	Joe R Reed			Date:	5/10/23				

Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Aaron Kimberlin</u>		Location: <u>Duck Creek</u>	
Weather: <u>73°-74° Sunny w/ n SE 8 mph</u>		Environment: <u>grass, dirt</u>	
Multiparameter Water Meter	Make: <u>Horiba</u>	Model: <u>U5000</u>	Serial Number: <u>04U1FVTF</u>
Water Level Meter	Make: <u>Merom</u>	Model: <u>D:PART</u>	Serial Number: <u>19FF211192HB</u>

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.00</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N/A</u>	<u>N/A</u>	MSI	L344-09	12/14/2023
pH 7.00a	<u>7.01</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N/A</u>	<u>N/A</u>	MSI	L343-07	12/9/2023
pH 10.00a	<u>10.00</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N/A</u>	<u>N/A</u>	MSI	M082-04	3/25/2024
SC Zero (DI)	<u>18</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>N/A</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2000</u>	µS/cm	±5%	<u>P</u>	<u>N/A</u>	<u>N/A</u>	Geotech	2GE1442	May-23
ORP	<u>238</u>	mV	±15 mV	<u>P</u>	<u>N/A</u>	<u>N/A</u>	InSitu	2G1762	Jun-23
DO (Zero pt)	<u>0.00</u>	mg/L	±0.1	<u>P</u>	<u>N/A</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>09.81</u>	%	97-100%	<u>P</u>	<u>N/A</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>N/A</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

23°C @ 21°C

ICV (Initial Calibration Verification)					Time: <u>0945</u>
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
pH 4.00b	<u>4.03</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N/A</u>
pH 7.00b	<u>6.99</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N/A</u>
pH 10.00b	<u>10.04</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N/A</u>
SC 1000	<u>989</u>	µS/cm	±5%	<u>P</u>	<u>N/A</u>

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: <u>1530</u>				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.05</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N/A</u>	<u>N/A</u>	MSI	L344-09	12/14/2023
pH 7.00a	<u>7.07</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N/A</u>	<u>N/A</u>	MSI	L343-07	12/9/2023
pH 10.00a	<u>10.03</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N/A</u>	<u>N/A</u>	MSI	M082-04	3/25/2024
SC 1000	<u>1010</u>	µS/cm	±5%	<u>P</u>	<u>N/A</u>	<u>N/A</u>	Ricca	4207N97	Jul-24
DO (Zero pt)	<u>0.00</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>N/A</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>N/A</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L344-09	12/14/2023
7.00a		s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
10.00a		s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000		µS/cm	±5%				Ricca	4207N97	Jul-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: <u>[Signature]</u>	Date: <u>5/11/2023</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: JD				Location: Vista Duck Creek					
Weather: 70-75°F m. sunny wind SE 10-14 mph				Environment: grass					
Multiparameter Water Meter		Make: AquaRoll	Model: 600	Serial Number: 762215					
Water Level Meter		Make: Heron	Model: Dipper-T	Serial Number: 11FF2209305 ML					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.81	s.u.	±0.1 s.u.	Fail	Yes	4.00	MSI	L344-09	12/14/2023
pH 7.00a	6.95	s.u.	±0.1 s.u.	pass	No	NA	MSI	L343-07	12/9/2023
pH 10.00a	9.93	s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC Zero (DI)	15.67	µS/cm	0-25 µS/cm				Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1964.5	µS/cm	±5%				Geotech	2GE1442	May-23
ORP	237.7	mV	±15 mV				InSitu	2G1762	Jun-23
DO (Zero pt)	0.07	mg/L	±0.1				Macron	#000228049	8/26/2025
DO (Saturated)	98.17	%	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: 0739					
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.03	s.u.	±0.15 s.u.	pass	NA	Geotech	2GE870	Mar-24	
pH 7.00b	6.89	s.u.	±0.15 s.u.			Geotech	2GC931	Mar-24	
pH 10.00b	9.92	s.u.	±0.15 s.u.			Geotech	2GE820	May-24	
SC 1000	992.10	µS/cm	±5%			Ricca	4207N97	Jul-24	
Approx. every 4 hrs, unless only one well									
CCV (Continued Calibration Verification):				Time: 1541					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.08	s.u.	±0.1 s.u.	pass	No	NA	MSI	L344-09	12/14/2023
pH 7.00a	7.10	s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
pH 10.00a	10.02	s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000	991.18	µS/cm	±5%				Ricca	4207N97	Jul-24
DO (Zero pt)	0.07	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	L344-09	12/14/2023
7.00a		s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
10.00a		s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000		µS/cm	±5%				Ricca	4207N97	Jul-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: 5/11/23					

Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Kyle Lane</u>				Location: <u>Duck Creek</u>					
Weather: <u>69° sunny</u>				Environment: <u>Dry</u>					
Multiparameter Water Meter		Make: <u>Hanna</u>	Model: <u>V-5000</u>	Serial Number: <u>PW264503</u>					
Water Level Meter		Make: <u>Hanna</u>	Model: <u>Water Tape</u>	Serial Number: <u>3717-1</u>					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.00</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	L344-09	12/14/2023
pH 7.00a	<u>6.94</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	L343-07	12/9/2023
pH 10.00a	<u>9.98</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	M082-04	3/25/2024
SC Zero (DI)	<u>10.00</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>NA</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2.020</u>	µS/cm	±5%	<u>P</u>	<u>NA</u>	<u>NA</u>	Geotech	2GE1442	May-23
ORP	<u>230</u>	mV	±15 mV	<u>P</u>	<u>NA</u>	<u>NA</u>	InSitu	2G1762	Jun-23
DO (Zero pt)	<u>0.08</u>	mg/L	±0.1	<u>P</u>	<u>NA</u>	<u>NA</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>97.10</u>	%	97-100%	<u>P</u>	<u>NA</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>1.20</u>	NTU	<2 NTU	<u>P</u>	<u>NA</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)
Approx. every 4 hrs, unless only one well									
ICV (Initial Calibration Verification)					Time: <u>09:41</u>				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>3.98</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	2GE870	Mar-24	
pH 7.00b	<u>7.03</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	2GC931	Mar-24	
pH 10.00b	<u>9.89</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	2GE820	May-24	
SC 1000	<u>1.010</u>	µS/cm	±5%	<u>P</u>	<u>NA</u>	Ricca	4207N97	Jul-24	
Approx. every 4 hrs, unless only one well									
CCV (Continued Calibration Verification):					Time: <u>NA</u>				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.05</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	L344-09	12/14/2023
pH 7.00a	<u>7.04</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	L343-07	12/9/2023
pH 10.00a	<u>10.88</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	M082-04	3/25/2024
SC 1000	<u>1.040</u>	µS/cm	±5%	<u>P</u>	<u>NA</u>	<u>NA</u>	Ricca	4207N97	Jul-24
DO (Zero pt)	<u>0.00</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>NA</u>	<u>NA</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>1.50</u>	NTU	<2 NTU	<u>P</u>	<u>NA</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)
Approx. every 4 hrs, unless only one well									
CCV (Continued Calibration Verification):					Time: <u>16.04</u>				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a	<u>4.05</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	L344-09	12/14/2023
7.00a	<u>7.04</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	L343-07	12/9/2023
10.00a	<u>10.88</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	M082-04	3/25/2024
SC 1000	<u>1.040</u>	µS/cm	±5%	<u>P</u>	<u>NA</u>	<u>NA</u>	Ricca	4207N97	Jul-24
DO (Zero pt)	<u>0.00</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>NA</u>	<u>NA</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>1.50</u>	NTU	<2 NTU	<u>P</u>	<u>NA</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)
Comments: <u>NA</u>									
Signature: <u>[Signature]</u>					Date: <u>5-11-23</u>				

Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Joe Reed</u>				Location: <u>Duck Creek</u>			
Weather: <u>69-80° wind 9-10 mph</u>				Environment: <u>Gravel Road</u>			
Multiparameter Water Meter		Make: <u>Horiba</u>	Model: <u>U5000</u>	Serial Number: <u>Y29 KJ9HA</u>			
Water Level Meter		Make: <u>Solinst</u>	Model: <u>101</u>	Serial Number: <u>P7/LM2</u>			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.00</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	/	MSI	L344-09	12/14/2023
pH 7.00a	<u>7.00</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>		MSI	L343-07	12/9/2023
pH 10.00a	<u>9.99</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>		MSI	M082-04	3/25/2024
SC Zero (DI)	<u>0.0</u>	µS/cm	0-25 µS/cm	<u>P</u>	<u>N</u>		Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2010</u>	µS/cm	±5%	<u>P</u>	<u>N</u>		Geotech	2GE1442	May-23
ORP	<u>240</u>	mV	±15 mV	<u>P</u>	<u>N</u>		InSitu	2G1762	Jun-23
DO (Zero pt)	<u>0.05</u>	mg/L	±0.1	<u>P</u>	<u>N</u>		Macron	#000228049	8/26/2025
DO (Saturated)	<u>99.1</u>	%	97-100%	<u>P</u>	<u>N</u>		Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>N</u>	Pace Labs	N/A (DI)	N/A (DI)	

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: <u>955</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>3.99</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	Geotech	2GE870	Mar-24	
pH 7.00b	<u>7.00</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	Geotech	2GC931	Mar-24	
pH 10.00b	<u>9.96</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	Geotech	2GE820	May-24	
SC 1000	<u>1000</u>	µS/cm	±5%	<u>P</u>	<u>N</u>	Ricca	4207N97	Jul-24	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: <u>1615</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.02</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	/	MSI	L344-09	12/14/2023
pH 7.00a	<u>7.01</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>		MSI	L343-07	12/9/2023
pH 10.00a	<u>10.00</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>		MSI	M082-04	3/25/2024
SC 1000	<u>990</u>	µS/cm	±5%	<u>P</u>	<u>N</u>		Ricca	4207N97	Jul-24
DO (Zero pt)	<u>0.05</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>N</u>		Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>N</u>		Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L344-09	12/14/2023
7.00a		s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
10.00a		s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000		µS/cm	±5%				Ricca	4207N97	Jul-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: <u>Joseph R Reed</u>	Date: <u>5/11/23</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel:	J. Joe Reed			Location:	Duck creek				
Weather:	63-81°F cloudy wind 7 mph			Environment:	wet / gravel road / grass				
Multiparameter Water Meter	Make:	HORIBA	Model:	V5000	Serial Number:	PW2GRJD3			
Water Level Meter	Make:	Solinst	Model:	101	Serial Number:	252 879			

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		MSI	L344-09	12/14/2023
pH 7.00a	6.99	s.u.	±0.1 s.u.	P	N		MSI	L343-07	12/9/2023
pH 10.00a	10.00	s.u.	±0.1 s.u.	P	N		MSI	M082-04	3/25/2024
SC Zero (DI)	4	µS/cm	0-25 µS/cm	P	N		Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1990	µS/cm	±5%	P	N		Geotech	2GE1442	May-23
ORP	338	mV	±15 mV	P	N		InSitu	2G1762	Jun-23
DQ (Zero pt)	0.05	mg/L	±0.1	P	N		Macron	#000228049	8/26/2025
DO (Saturated)	99.5	%	97-100%	P	N		Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	P	N		Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time:	912			
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Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	3.99	s.u.	±0.15 s.u.	P	N	Geotech	2GE870	Mar-24
pH 7.00b	6.98	s.u.	±0.15 s.u.	P	N	Geotech	2GC931	Mar-24
pH 10.00b	9.98	s.u.	±0.15 s.u.	P	N	Geotech	2GE820	May-24
SC 1000	998	µS/cm	±5%	P	N	Ricca	4207N97	Jul-24

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:	1320			
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Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.00	s.u.	±0.1 s.u.	P	N		MSI	L344-09	12/14/2023
pH 7.00a	6.99	s.u.	±0.1 s.u.	P	N		MSI	L343-07	12/9/2023
pH 10.00a	10.01	s.u.	±0.1 s.u.	P	N		MSI	M082-04	3/25/2024
SC 1000	1010	µS/cm	±5%	P	N		Ricca	4207N97	Jul-24
DO (Zero pt)	0.05	mg/L	±0.1 mg/L	P	N		Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	P	N		Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
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Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L344-09	12/14/2023
7.00a		s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
10.00a		s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000		µS/cm	±5%				Ricca	4207N97	Jul-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:	Joseph R Reed		Date:	5/12/23	
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Multiparameter Meter Field Calibration Checklist

Field Personnel:	Katie Lane			Location:	Duck Creek				
Weather:	63° to 81° rain			Environment:	wet				
Multiparameter Water Meter	Make:	HORIBA	Model:	V-500B	Serial Number:	YLAKTJ9HA			
Water Level Meter	Make:	Huron	Model:	Water tape	Serial Number:	3717T			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.05	s.u.	±0.1 s.u.	P	NA	NA	MSI	L344-09	12/14/2023
pH 7.00a	7.00	s.u.	±0.1 s.u.	P	NA	NA	MSI	L343-07	12/9/2023
pH 10.00a	9.83	s.u.	±0.1 s.u.	F	yes	9.93	MSI	M082-04	3/25/2024
SC Zero (DI)	21.00	µS/cm	0<25 µS/cm	P	NA	NA	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1994	µS/cm	±5%				Geotech	2GE1442	May-23
ORP	216	mV	±15 mV				InSitu	2G1762	Jun-23
DO (Zero pt)	0.01	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	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time:	09:20			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.00	s.u.	±0.15 s.u.	P	NA	Geotech	2GE870	Mar-24	
pH 7.00b	6.98	s.u.	±0.15 s.u.			Geotech	2GC931	Mar-24	
pH 10.00b	8.92	s.u.	±0.15 s.u.			Geotech	2GE820	May-24	
SC 1000	1280	µS/cm	±5%	F	yes / 999	Ricca	4207N97	Jul-24	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:	NA			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a		s.u.	±0.1 s.u.				MSI	L344-09	12/14/2023
pH 7.00a		s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
pH 10.00a		s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000		µS/cm	±5%				Ricca	4207N97	Jul-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)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:	13:15			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a	4.06	s.u.	±0.1 s.u.	P	NA	NA	MSI	L344-09	12/14/2023
7.00a	7.00	s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
10.00a	10.01	s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000	1026	µS/cm	±5%				Ricca	4207N97	Jul-24
DO (Zero pt)	0.04	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)

Comments:

Signature:	Noel		Date:	5-12-23	
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Multiparameter Meter Field Calibration Checklist

Field Personnel:	Aaron Amberton			Location:	Duck creek				
Weather:	60°-77°F, cloudy, 12 in rain, SE wind			Environment:	grass, mud				
Multiparameter Water Meter	Make:	HORIBA	Model:	U5000	Serial Number:	U4U1F7vF			
Water Level Meter	Make:	Heron	Model:	D'PART	Serial Number:	19FF211192HB			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.00	s.u.	±0.1 s.u.	P	NO	N/A	MSI	L344-09	12/14/2023
pH 7.00a	7.01	s.u.	±0.1 s.u.	P			MSI	L343-07	12/9/2023
pH 10.00a	10.05	s.u.	±0.1 s.u.	P			MSI	M082-04	3/25/2024
SC Zero (DI)	18	µS/cm	0<25 µS/cm	I			Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2080	µS/cm	±5%	I			Geotech	2GE1442	May-23
ORP	232	mV	±15 mV	I			InSitu	2G1762	Jun-23
DO (Zero pt)	0.04	mg/L	±0.1	I			Macron	#000228049	8/26/2025
DO (Saturated)	99.87	%	97-100%	I			Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	I			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time:	0905			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.03	s.u.	±0.15 s.u.	P	N/A	Geotech	2GE870	Mar-24	
pH 7.00b	6.91	s.u.	±0.15 s.u.	P		Geotech	2GC931	Mar-24	
pH 10.00b	10.03	s.u.	±0.15 s.u.	P		Geotech	2GE820	May-24	
SC 1000	106	µS/cm	±5%	I		Ricca	4207N97	Jul-24	

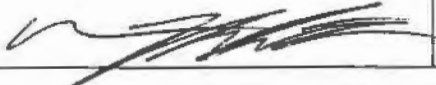
Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:	1300			
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	L344-09	12/14/2023
pH 7.00a	7.00	s.u.	±0.1 s.u.	P			MSI	L343-07	12/9/2023
pH 10.00a	10.06	s.u.	±0.1 s.u.	P			MSI	M082-04	3/25/2024
SC 1000	975	µS/cm	±5%	I			Ricca	4207N97	Jul-24
DO (Zero pt)	0.04	mg/L	±0.1 mg/L	I			Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	I			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L344-09	12/14/2023
7.00a		s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
10.00a		s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000		µS/cm	±5%				Ricca	4207N97	Jul-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:	5/12/2023
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Multiparameter Meter Field Calibration Checklist

Field Personnel:	JD			Location:	Vista Duck Creek				
Weather:	71-79°F cloudy wind SE 10 mph			Environment:	grass				
Multiparameter Water Meter	Make:	Aquatrill	Model:	600	Serial Number:	762215			
Water Level Meter	Make:	Heron	Model:	Dipper-T	Serial Number:	11FF2209305ML			
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	NA	MSI	L344-09	12/14/2023
pH 7.00a	7.06	s.u.	±0.1 s.u.	pass			MSI	L343-07	12/9/2023
pH 10.00a	10.04	s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC Zero (DI)	4.80	µS/cm	0<25 µS/cm				Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1987.4	µS/cm	±5%				Geotech	2GE1442	May-23
ORP	235.0	mV	±15 mV				InSitu	2G1762	Jun-23
DO (Zero pt)	0.05	mg/L	±0.1				Macron	#000228049	8/26/2025
DO (Saturated)	99.54	%	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:	0905			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.04	s.u.	±0.15 s.u.	pass	NA	Geotech	2GE870	Mar-24	
pH 7.00b	6.94	s.u.	±0.15 s.u.			Geotech	2GC931	Mar-24	
pH 10.00b	9.96	s.u.	±0.15 s.u.			Geotech	2GE820	May-24	
SC 1000	973.16	µS/cm	±5%			Ricca	4207N97	Jul-24	

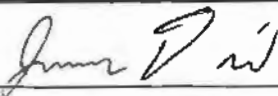
Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:	1302			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.06	s.u.	±0.1 s.u.	pass	No	NA	MSI	L344-09	12/14/2023
pH 7.00a	7.10	s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
pH 10.00a	10.02	s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000	991.07	µS/cm	±5%				Ricca	4207N97	Jul-24
DO (Zero pt)	0.08	mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)	0.34	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	L344-09	12/14/2023
7.00a		s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
10.00a		s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000		µS/cm	±5%				Ricca	4207N97	Jul-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:	5/12/23
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Multiparameter Meter Field Calibration Checklist

Field Personnel:	Aaron Remberton			Location:	Duck Creek				
Weather:	62°-71° F, cloudy, wind NE 8 mph			Environment:	grass, gravel, dirt, woods				
Multiparameter Water Meter	Make:	Horiba	Model:	U5000	Serial Number:	U4U1 FVTF			
Water Level Meter	Make:	Hera	Model:	Differ T	Serial Number:	3717-T			
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	L344-09	12/14/2023
pH 7.00a	7.00	s.u.	±0.1 s.u.	P			MSI	L343-07	12/9/2023
pH 10.00a	10.05	s.u.	±0.1 s.u.	P			MSI	M082-04	3/25/2024
SC Zero (DI)	19	µS/cm	0<25 µS/cm	P			Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2020	µS/cm	±5%	P			Geotech	2GE1442	May-23
ORP	240	mV	±15 mV	P			InSitu	2G1762	Jun-23
DO (Zero pt)	0.00	mg/L	±0.1	P			Macron	#000228049	8/26/2025
DO (Saturated)	95.62	%	97-100%	P			Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	P			Pace Labs	N/A (DI)	N/A (DI)
Approx. every 4 hrs, unless only one well									
ICV (Initial Calibration Verification)					Time:	0930			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	3.99	s.u.	±0.15 s.u.	P	N/A	Geotech	2GE870	Mar-24	
pH 7.00b	6.91	s.u.	±0.15 s.u.	P		Geotech	2GC931	Mar-24	
pH 10.00b	9.90	s.u.	±0.15 s.u.	P		Geotech	2GE820	May-24	
SC 1000	1000	µS/cm	±5%	P		Ricca	4207N97	Jul-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	4.02	s.u.	±0.1 s.u.	P	NO	N/A	MSI	L344-09	12/14/2023
pH 7.00a	7.05	s.u.	±0.1 s.u.	P			MSI	L343-07	12/9/2023
pH 10.00a	10.08	s.u.	±0.1 s.u.	P			MSI	M082-04	3/25/2024
SC 1000	1010	µS/cm	±5%	P			Ricca	4207N97	Jul-24
DO (Zero pt)	0.09	mg/L	±0.1 mg/L	P			Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	P			Pace Labs	N/A (DI)	N/A (DI)
Approx. every 4 hrs, unless only one well									
CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L344-09	12/14/2023
7.00a		s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
10.00a		s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000		µS/cm	±5%				Ricca	4207N97	Jul-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:	5/15/2023			

Multiparameter Meter Field Calibration Checklist

Field Personnel: Joe Reed		Location: Duck Creek Power	
Weather: cloudy 62-71°F wind 6 mph		Environment: grassy	
Multiparameter Water Meter	Make: Horiba	Model: U5000	Serial Number: PW2GKU D3
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	3.98	s.u.	±0.1 s.u.	P	N		MSI	L344-09	12/14/2023
pH 7.00a	6.99	s.u.	±0.1 s.u.	P	N		MSI	L343-07	12/9/2023
pH 10.00a	9.98	s.u.	±0.1 s.u.	P	N		MSI	M082-04	3/25/2024
SC Zero (DI)	2.2	µS/cm	0-25 µS/cm	P	N		Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1990	µS/cm	±5%	P	N		Geotech	2GE1442	May-23
ORP	240	mV	±15 mV	P	N		InSitu	2G1762	Jun-23
DO (Zero pt)	0.04	mg/L	±0.1	P	N		Macron	#000228049	8/26/2025
DO (Saturated)	98.4	%	97-100%	P	N		Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	P	N		Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 929
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
pH 4.00b	3.99	s.u.	±0.15 s.u.	P	
pH 7.00b	7.00	s.u.	±0.15 s.u.	P	
pH 10.00b	9.98	s.u.	±0.15 s.u.	P	
SC 1000	990	µS/cm	±5%	P	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 141615
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
pH 4.00a	4.01	s.u.	±0.1 s.u.	P	
pH 7.00a	7.00	s.u.	±0.1 s.u.	P	
pH 10.00a	10.02	s.u.	±0.1 s.u.	P	
SC 1000	1020	µS/cm	±5%	P	
DO (Zero pt)	0.03	mg/L	±0.1 mg/L	P	
Turbidity (DI)	0.0	NTU	<2 NTU	P	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4.00a		s.u.	±0.1 s.u.		
7.00a		s.u.	±0.1 s.u.		
10.00a		s.u.	±0.1 s.u.		
SC 1000		µS/cm	±5%		
DO (Zero pt)		mg/L	±0.1 mg/L		
Turbidity (DI)		NTU	<2 NTU		

Comments:

Signature: Joe Reed	Date: 5/15/23
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Multiparameter Meter Field Calibration Checklist

Field Personnel: JO				Location: Vista Duck Creek			
Weather: 61-68°F & cloudy with ENE 10 mph				Environment: grass			
Multiparameter Water Meter		Make: Aquamill	Model: 600	Serial Number: 762215			
Water Level Meter		Make: Hera	Model: Dipper-T	Serial Number: 11FF2209305ML			

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	NA	NA	MSI	L344-09	12/14/2023
pH 7.00a	7.05	s.u.	±0.1 s.u.	pass	NA	NA	MSI	L343-07	12/9/2023
pH 10.00a	10.06	s.u.	±0.1 s.u.	pass	NA	NA	MSI	M082-04	3/25/2024
SC Zero (DI)	10.31	µS/cm	0<25 µS/cm	pass	NA	NA	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1751.4	µS/cm	±5%	pass	NA	NA	Geotech	2GE1442	May-23
ORP	237.5	mV	±15 mV	pass	NA	NA	InSitu	2G1762	Jun-23
DO (Zero pt)	0.08	mg/L	±0.1	pass	NA	NA	Macron	#000228049	8/26/2025
DO (Saturated)	99.28	%	97-100%	pass	NA	NA	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.00	NTU	<2 NTU	pass	NA	NA	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 0933	
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer
pH 4.00b	4.07	s.u.	±0.15 s.u.	pass	NA	Geotech
pH 7.00b	6.93	s.u.	±0.15 s.u.	pass	NA	Geotech
pH 10.00b	9.99	s.u.	±0.15 s.u.	pass	NA	Geotech
SC 1000	1032.8	µS/cm	±5%	pass	NA	Ricca

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 1610				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.10	s.u.	±0.1 s.u.	pass	NA	NA	MSI	L344-09	12/14/2023
pH 7.00a	7.05	s.u.	±0.1 s.u.	pass	NA	NA	MSI	L343-07	12/9/2023
pH 10.00a	10.09	s.u.	±0.1 s.u.	pass	NA	NA	MSI	M082-04	3/25/2024
SC 1000	990.18	µS/cm	±5%	pass	NA	NA	Ricca	4207N97	Jul-24
DO (Zero pt)	0.07	mg/L	±0.1 mg/L	pass	NA	NA	Macron	#000228049	8/26/2025
Turbidity (DI)	0.00	NTU	<2 NTU	pass	NA	NA	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L344-09	12/14/2023
7.00a		s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
10.00a		s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000		µS/cm	±5%				Ricca	4207N97	Jul-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: 5/15/23
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>KYL Lane</u>				Location: <u>Duck Creek</u>			
Weather: <u>57° to 70° cloudy</u>				Environment: <u>Dry</u>			
Multiparameter Water Meter		Make: <u>Hanna</u>	Model: <u>V-5060</u>	Serial Number: <u>YL9K39HA</u>			
Water Level Meter		Make: <u>Hanna</u>	Model: <u>Water tape</u>	Serial Number: <u>19FF220213LML</u>			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.12</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>yes</u>	<u>4.00</u>	MSI	L344-09	12/14/2023
pH 7.00a	<u>7.18</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>yes</u>	<u>7.00</u>	MSI	L343-07	12/9/2023
pH 10.00a	<u>10.08</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>yes</u>	<u>NA</u>	MSI	M082-04	3/25/2024
SC Zero (DI)	<u>20.10</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>yes</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>19.70</u>	µS/cm	±5%	<u>P</u>	<u>yes</u>	<u>NA</u>	Geotech	2GE1442	May-23
ORP	<u>215</u>	mV	±15 mV	<u>P</u>	<u>yes</u>	<u>NA</u>	InSitu	2G1762	Jun-23
DO (Zero pt)	<u>0.04</u>	mg/L	±0.1	<u>P</u>	<u>yes</u>	<u>NA</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>97.20</u>	%	97-100%	<u>P</u>	<u>yes</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>yes</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: <u>09:36</u>	
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer
pH 4.00b	<u>3.99</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech
pH 7.00b	<u>6.98</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech
pH 10.00b	<u>10.09</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech
SC 1000	<u>10.30</u>	µS/cm	±5%	<u>P</u>	<u>NA</u>	Ricca

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: <u>NA</u>	
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
pH 4.00a	<u>4.03</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>
pH 7.00a	<u>6.94</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>
pH 10.00a	<u>9.97</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>
SC 1000	<u>9.97</u>	µS/cm	±5%	<u>P</u>	<u>NA</u>	<u>NA</u>
DO (Zero pt)	<u>0.05</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>NA</u>	<u>NA</u>
Turbidity (DI)	<u>0.58</u>	NTU	<2 NTU	<u>P</u>	<u>NA</u>	<u>NA</u>

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: <u>16:21</u>	
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4.00a	<u>4.03</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>
7.00a	<u>6.94</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>
10.00a	<u>9.97</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>
SC 1000	<u>9.97</u>	µS/cm	±5%	<u>P</u>	<u>NA</u>	<u>NA</u>
DO (Zero pt)	<u>0.05</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>NA</u>	<u>NA</u>
Turbidity (DI)	<u>0.58</u>	NTU	<2 NTU	<u>P</u>	<u>NA</u>	<u>NA</u>

Comments: NA

Signature: <u>K Lane</u>	Date: <u>5-15-2023</u>
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Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

October 21, 2023

Daryl Johnson
Vistra - Duck Creek
17751 North Cilco Road
Canton, IL 61520-8761

Dear Daryl Johnson:

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,

A handwritten signature in cursive script, appearing to read "Diane Billings".

Diane Billings
Project Manager



SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order GG04129

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



Work Order GG04417

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



Work Order GI01375

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



ANALYTICAL RESULTS

Sample: GG04129-10
Name: BA06
Matrix: Ground Water - Grab

Sampled: 07/24/23 15:34
Received: 07/24/23 17:42

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	560	mg/L		07/25/23 13:59	100	100	07/25/23 13:59	TMS	EPA 300.0 REV 2.1
Sulfate	360	mg/L		07/25/23 13:59	100	100	07/25/23 13:59	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	25.04	Feet		07/24/23 15:34	1		07/24/23 15:34	JD	Field*
Dissolved oxygen, Field	2.5	mg/L		07/24/23 15:34	1		07/24/23 15:34	JD	Field*
Oxidation Reduction Potential	-40.0	mV		07/24/23 15:34	1	-500	07/24/23 15:34	JD	Field*
pH, Field Measured	6.54	pH Units		07/24/23 15:34	1		07/24/23 15:34	JD	Field*
Specific Conductance, Field Measured	3140	umhos/cm		07/24/23 15:34	1		07/24/23 15:34	JD	Field*
Temperature, Field Measured	18.7	°C		07/24/23 15:34	1		07/24/23 15:34	JD	Field*
Temperature, Field Measured	65.7	°F		07/24/23 15:34	1		07/24/23 15:34	JD	Field*
Turbidity, Field Measured	5.30	NTU		07/24/23 15:34	1	0.00	07/24/23 15:34	JD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	560	mg/L		08/04/23 09:45	1	2.0	08/04/23 09:45	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		08/04/23 09:45	1	2.0	08/04/23 09:45	CPS	SM 2320B 1997*
Fluoride	0.264	mg/L		07/27/23 13:03	1	0.250	07/27/23 13:03	ANK	SM 4500F C 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	2300	mg/L		07/28/23 10:45	1	26	07/28/23 14:16	MKH	SM 2540C
Total Metals - PIA									
Boron	9000	ug/L		07/26/23 08:54	5	10	07/28/23 14:42	TJJ	EPA 6020A
Calcium	280	mg/L		07/26/23 08:54	5	0.20	08/01/23 12:42	wjm	EPA 6020A
Magnesium	210	mg/L		07/26/23 08:54	5	0.10	08/01/23 12:42	wjm	EPA 6020A
Potassium	0.28	mg/L		07/26/23 08:54	5	0.10	08/01/23 12:42	wjm	EPA 6020A
Sodium	16	mg/L		07/26/23 08:54	5	0.10	08/01/23 12:42	wjm	EPA 6020A



ANALYTICAL RESULTS

Sample: GG04129-11
Name: BA01
Matrix: Ground Water - Grab

Sampled: 07/24/23 13:25
Received: 07/24/23 17:42

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	18	mg/L	Q4	07/25/23 15:16	5	5.0	07/25/23 15:16	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		07/25/23 14:18	1	0.250	07/25/23 14:18	TMS	EPA 300.0 REV 2.1
Sulfate	150	mg/L	Q4	07/25/23 15:36	25	25	07/25/23 15:36	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	15.79	Feet		07/24/23 13:25	1		07/24/23 13:25	JD	Field*
Dissolved oxygen, Field	3.4	mg/L		07/24/23 13:25	1		07/24/23 13:25	JD	Field*
Oxidation Reduction Potential	26.0	mV		07/24/23 13:25	1	-500	07/24/23 13:25	JD	Field*
pH, Field Measured	6.67	pH Units		07/24/23 13:25	1		07/24/23 13:25	JD	Field*
Specific Conductance, Field Measured	982.0	umhos/cm		07/24/23 13:25	1		07/24/23 13:25	JD	Field*
Temperature, Field Measured	18.8	°C		07/24/23 13:25	1		07/24/23 13:25	JD	Field*
Temperature, Field Measured	65.8	°F		07/24/23 13:25	1		07/24/23 13:25	JD	Field*
Turbidity, Field Measured	19.1	NTU		07/24/23 13:25	1	0.00	07/24/23 13:25	JD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	390	mg/L		08/04/23 09:45	1	2.0	08/04/23 09:45	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		08/04/23 09:45	1	2.0	08/04/23 09:45	CPS	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	640	mg/L		07/28/23 10:45	1	26	07/28/23 14:16	MKH	SM 2540C
Total Metals - PIA									
Boron	72	ug/L		07/26/23 08:54	5	10	07/28/23 14:45	TJJ	EPA 6020A
Calcium	110	mg/L		07/26/23 08:54	5	0.20	08/01/23 12:48	wjm	EPA 6020A
Magnesium	61	mg/L		07/26/23 08:54	5	0.10	08/01/23 12:48	wjm	EPA 6020A
Potassium	0.79	mg/L		07/26/23 08:54	5	0.10	08/01/23 12:48	wjm	EPA 6020A
Sodium	14	mg/L		07/26/23 08:54	5	0.10	08/01/23 12:48	wjm	EPA 6020A



ANALYTICAL RESULTS

Sample: GG04129-12
Name: BA03
Matrix: Ground Water - Grab

Sampled: 07/24/23 12:06
Received: 07/24/23 17:42

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	5.0	mg/L		07/25/23 15:55	1	1.0	07/25/23 15:55	TMS	EPA 300.0 REV 2.1
Fluoride	0.261	mg/L		07/25/23 15:55	1	0.250	07/25/23 15:55	TMS	EPA 300.0 REV 2.1
Sulfate	17	mg/L		07/25/23 16:14	10	10	07/25/23 16:14	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	10.48	Feet		07/24/23 12:06	1		07/24/23 12:06	JD	Field*
Dissolved oxygen, Field	0.42	mg/L		07/24/23 12:06	1		07/24/23 12:06	JD	Field*
Oxidation Reduction Potential	11.1	mV		07/24/23 12:06	1	-500	07/24/23 12:06	JD	Field*
pH, Field Measured	6.89	pH Units		07/24/23 12:06	1		07/24/23 12:06	JD	Field*
Specific Conductance, Field Measured	798.9	umhos/cm		07/24/23 12:06	1		07/24/23 12:06	JD	Field*
Temperature, Field Measured	65.5	°F		07/24/23 12:06	1		07/24/23 12:06	JD	Field*
Temperature, Field Measured	18.6	°C		07/24/23 12:06	1		07/24/23 12:06	JD	Field*
Turbidity, Field Measured	81.9	NTU		07/24/23 12:06	1	0.00	07/24/23 12:06	JD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	450	mg/L		08/04/23 09:45	1	2.0	08/04/23 09:45	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		08/04/23 09:45	1	2.0	08/04/23 09:45	CPS	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	460	mg/L		07/28/23 10:45	1	26	07/28/23 14:16	MKH	SM 2540C
Total Metals - PIA									
Boron	45	ug/L		07/26/23 08:54	5	10	07/28/23 14:48	TJJ	EPA 6020A
Calcium	98	mg/L		07/26/23 08:54	5	0.20	08/01/23 12:51	wjm	EPA 6020A
Magnesium	55	mg/L		07/26/23 08:54	5	0.10	08/01/23 12:51	wjm	EPA 6020A
Potassium	0.81	mg/L		07/26/23 08:54	5	0.10	08/01/23 12:51	wjm	EPA 6020A
Sodium	6.9	mg/L		07/26/23 08:54	5	0.10	08/01/23 12:51	wjm	EPA 6020A



ANALYTICAL RESULTS

Sample: GG04129-13
Name: BA04
Matrix: Ground Water - Grab

Sampled: 07/24/23 14:06
Received: 07/24/23 17:42

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	54	mg/L		07/25/23 16:53	25	25	07/25/23 16:53	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		07/25/23 16:34	1	0.250	07/25/23 16:34	TMS	EPA 300.0 REV 2.1
Sulfate	180	mg/L		07/25/23 16:53	25	25	07/25/23 16:53	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	6.99	Feet		07/24/23 14:06	1		07/24/23 14:06	JD	Field*
Dissolved oxygen, Field	0.42	mg/L		07/24/23 14:06	1		07/24/23 14:06	JD	Field*
Oxidation Reduction Potential	138	mV		07/24/23 14:06	1	-500	07/24/23 14:06	JD	Field*
pH, Field Measured	6.71	pH Units		07/24/23 14:06	1		07/24/23 14:06	JD	Field*
Specific Conductance, Field Measured	1129	umhos/cm		07/24/23 14:06	1		07/24/23 14:06	JD	Field*
Temperature, Field Measured	18.0	°C		07/24/23 14:06	1		07/24/23 14:06	JD	Field*
Temperature, Field Measured	64.4	°F		07/24/23 14:06	1		07/24/23 14:06	JD	Field*
Turbidity, Field Measured	39.1	NTU		07/24/23 14:06	1	0.00	07/24/23 14:06	JD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	410	mg/L		08/04/23 09:45	1	2.0	08/04/23 09:45	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		08/04/23 09:45	1	2.0	08/04/23 09:45	CPS	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	710	mg/L		07/28/23 10:45	1	26	07/28/23 14:16	MKH	SM 2540C
Total Metals - PIA									
Boron	1900	ug/L		07/26/23 08:54	5	10	07/28/23 14:51	TJJ	EPA 6020A
Calcium	130	mg/L		07/26/23 08:54	5	0.20	08/01/23 12:55	wjm	EPA 6020A
Magnesium	69	mg/L		07/26/23 08:54	5	0.10	08/01/23 12:55	wjm	EPA 6020A
Potassium	0.89	mg/L		07/26/23 08:54	5	0.10	08/01/23 12:55	wjm	EPA 6020A
Sodium	22	mg/L		07/26/23 08:54	5	0.10	08/01/23 12:55	wjm	EPA 6020A



ANALYTICAL RESULTS

Sample: GG04129-14
Name: BA05
Matrix: Ground Water - Grab

Sampled: 07/24/23 15:52
Received: 07/24/23 17:42

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	9.6	mg/L		07/26/23 20:30	5	5.0	07/26/23 20:30	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		07/25/23 17:51	1	0.250	07/25/23 17:51	TMS	EPA 300.0 REV 2.1
Sulfate	500	mg/L		08/01/23 15:06	100	100	08/01/23 15:06	TMS	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	21.36	Feet		07/24/23 15:52	1		07/24/23 15:52	JD	Field*
Dissolved oxygen, Field	0.45	mg/L		07/24/23 15:52	1		07/24/23 15:52	JD	Field*
Oxidation Reduction Potential	-51.4	mV		07/24/23 15:52	1	-500	07/24/23 15:52	JD	Field*
pH, Field Measured	6.79	pH Units		07/24/23 15:52	1		07/24/23 15:52	JD	Field*
Specific Conductance, Field Measured	1592	umhos/cm		07/24/23 15:52	1		07/24/23 15:52	JD	Field*
Temperature, Field Measured	58.2	°F		07/24/23 15:52	1		07/24/23 15:52	JD	Field*
Temperature, Field Measured	14.6	°C		07/24/23 15:52	1		07/24/23 15:52	JD	Field*
Turbidity, Field Measured	5270	NTU		07/24/23 15:52	1	0.00	07/24/23 15:52	JD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	490	mg/L		08/04/23 09:45	1	2.0	08/04/23 09:45	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 2.0	mg/L		08/04/23 09:45	1	2.0	08/04/23 09:45	CPS	SM 2320B 1997*
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	1200	mg/L		07/28/23 10:45	1	26	07/28/23 14:16	MKH	SM 2540C
<u>Total Metals - PIA</u>									
Boron	120	ug/L		07/26/23 08:54	5	10	07/28/23 14:54	TJJ	EPA 6020A
Calcium	180	mg/L		07/26/23 08:54	5	0.20	08/01/23 12:59	wjm	EPA 6020A
Magnesium	100	mg/L		07/26/23 08:54	5	0.10	08/01/23 12:59	wjm	EPA 6020A
Potassium	2.4	mg/L		07/26/23 08:54	5	0.10	08/01/23 12:59	wjm	EPA 6020A
Sodium	42	mg/L		07/26/23 08:54	5	0.10	08/01/23 12:59	wjm	EPA 6020A



ANALYTICAL RESULTS

Sample: GG04129-16
Name: BA01 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 07/24/23 13:25
Received: 07/24/23 17:42

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	18	mg/L		07/25/23 19:08	5	5.0	07/25/23 19:08	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		07/25/23 18:49	1	0.250	07/25/23 18:49	TMS	EPA 300.0 REV 2.1
Sulfate	160	mg/L		07/25/23 19:28	25	25	07/25/23 19:28	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	15.79	Feet		07/24/23 13:25	1		07/24/23 13:25	JD	Field*
Dissolved oxygen, Field	3.4	mg/L		07/24/23 13:25	1		07/24/23 13:25	JD	Field*
Oxidation Reduction Potential	26.0	mV		07/24/23 13:25	1	-500	07/24/23 13:25	JD	Field*
pH, Field Measured	6.67	pH Units		07/24/23 13:25	1		07/24/23 13:25	JD	Field*
Specific Conductance, Field Measured	982.0	umhos/cm		07/24/23 13:25	1		07/24/23 13:25	JD	Field*
Temperature, Field Measured	65.8	°F		07/24/23 13:25	1		07/24/23 13:25	JD	Field*
Temperature, Field Measured	18.8	°C		07/24/23 13:25	1		07/24/23 13:25	JD	Field*
Turbidity, Field Measured	19.1	NTU		07/24/23 13:25	1	0.00	07/24/23 13:25	JD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	410	mg/L		08/04/23 09:45	1	2.0	08/04/23 09:45	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		08/04/23 09:45	1	2.0	08/04/23 09:45	CPS	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	680	mg/L		07/28/23 10:45	1	26	07/28/23 14:16	MKH	SM 2540C
Total Metals - PIA									
Boron	37	ug/L		07/26/23 08:54	5	10	07/28/23 15:00	TJJ	EPA 6020A
Calcium	110	mg/L		07/26/23 08:54	5	0.20	08/01/23 13:07	wjm	EPA 6020A
Magnesium	63	mg/L		07/26/23 08:54	5	0.10	08/01/23 13:07	wjm	EPA 6020A
Potassium	0.82	mg/L		07/26/23 08:54	5	0.10	08/01/23 13:07	wjm	EPA 6020A
Sodium	15	mg/L		07/26/23 08:54	5	0.10	08/01/23 13:07	wjm	EPA 6020A



ANALYTICAL RESULTS

Sample: GG04417-14
Name: BA02
Matrix: Ground Water - Grab

Sampled: 07/25/23 12:47
Received: 07/25/23 17:45

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	11	mg/L		07/26/23 16:48	5	5.0	07/26/23 16:48	TMS	EPA 300.0 REV 2.1
Fluoride	0.322	mg/L		07/26/23 16:28	1	0.250	07/26/23 16:28	TMS	EPA 300.0 REV 2.1
Sulfate	13	mg/L		07/26/23 16:48	5	5.0	07/26/23 16:48	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	12.02	Feet		07/25/23 12:47	1		07/25/23 12:47	FIELD	Field*
Dissolved oxygen, Field	1.8	mg/L		07/25/23 12:47	1		07/25/23 12:47	FIELD	Field*
Oxidation Reduction Potential	-25.9	mV		07/25/23 12:47	1	-500	07/25/23 12:47	FIELD	Field*
pH, Field Measured	6.79	pH Units		07/25/23 12:47	1		07/25/23 12:47	FIELD	Field*
Specific Conductance, Field Measured	740.6	umhos/cm		07/25/23 12:47	1		07/25/23 12:47	FIELD	Field*
Temperature, Field Measured	19.6	°C		07/25/23 12:47	1		07/25/23 12:47	FIELD	Field*
Temperature, Field Measured	67.4	°F		07/25/23 12:47	1		07/25/23 12:47	FIELD	Field*
Turbidity, Field Measured	37.3	NTU		07/25/23 12:47	1	0.00	07/25/23 12:47	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	490	mg/L		08/04/23 09:45	1	2.0	08/04/23 09:45	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 2.0	mg/L		08/04/23 09:45	1	2.0	08/04/23 09:45	CPS	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	620	mg/L		08/01/23 09:40	1	26	08/01/23 11:00	MKH	SM 2540C
Total Metals - PIA									
Boron	51	ug/L		07/27/23 09:21	5	10	08/09/23 16:54	TJJ	EPA 6020A
Calcium	99	mg/L		07/27/23 09:21	5	0.20	08/07/23 17:07	TJJ	EPA 6020A
Magnesium	47	mg/L		07/27/23 09:21	5	0.10	08/07/23 17:07	TJJ	EPA 6020A
Potassium	1.4	mg/L		07/27/23 09:21	5	0.10	08/07/23 17:07	TJJ	EPA 6020A
Sodium	48	mg/L		07/27/23 09:21	5	0.10	08/08/23 17:44	TJJ	EPA 6020A



ANALYTICAL RESULTS

Sample: GI01375-01
Name: BA03L
Matrix: Ground Water - Grab

Sampled: 09/06/23 10:54
Received: 09/06/23 14:06

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	13	mg/L	Q4	09/07/23 12:05	10	10	09/07/23 12:05	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		09/07/23 11:47	1	0.250	09/07/23 11:47	TMS	EPA 300.0 REV 2.1
Sulfate	420	mg/L	Q4	09/07/23 12:23	50	50	09/07/23 12:23	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	9.46	Feet		09/07/23 00:00	1		09/07/23 00:00	FIELD	Field*
Dissolved oxygen, Field	4.1	mg/L		09/07/23 00:00	1		09/07/23 00:00	FIELD	Field*
Oxidation Reduction Potential	217	mV		09/07/23 00:00	1	-500	09/07/23 00:00	FIELD	Field*
pH, Field Measured	6.72	pH Units		09/07/23 00:00	1		09/07/23 00:00	FIELD	Field*
Specific Conductance, Field Measured	1490	umhos/cm		09/07/23 00:00	1		09/07/23 00:00	FIELD	Field*
Temperature, Field Measured	66.9	°F		09/07/23 00:00	1		09/07/23 00:00	FIELD	Field*
Temperature, Field Measured	19.4	°C		09/07/23 00:00	1		09/07/23 00:00	FIELD	Field*
Turbidity, Field Measured	44.2	NTU		09/07/23 00:00	1	0.00	09/07/23 00:00	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	500	mg/L		09/13/23 15:18	1	10	09/13/23 15:18	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		09/13/23 15:18	1	10	09/13/23 15:18	CPS	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1900	mg/L		09/13/23 10:50	1	17	09/13/23 12:20	CPS	SM 2540C
Total Metals - PIA									
Boron	330	ug/L		09/14/23 08:52	5	10	09/19/23 11:05	TJJ	EPA 6020A
Calcium	200	mg/L		09/14/23 08:52	5	0.20	09/25/23 12:56	TJJ	EPA 6020A
Magnesium	110	mg/L		09/14/23 08:52	5	0.10	09/18/23 15:57	TJJ	EPA 6020A
Potassium	0.30	mg/L		09/14/23 08:52	5	0.10	09/18/23 15:57	TJJ	EPA 6020A
Sodium	15	mg/L		09/14/23 08:52	5	0.10	09/18/23 15:57	TJJ	EPA 6020A



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B339564 - SW 3015 - EPA 6020A</u>									
Blank (B339564-BLK1)				Prepared: 07/26/23 Analyzed: 07/28/23					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B339564-BS1)				Prepared: 07/26/23 Analyzed: 07/28/23					
Boron	663	ug/L		555.6		119	80-120		
Calcium	5.11	mg/L		5.556		92	80-120		
Magnesium	5.77	mg/L		5.556		104	80-120		
Potassium	5.43	mg/L		5.556		98	80-120		
Sodium	5.34	mg/L		5.556		96	80-120		
Matrix Spike (B339564-MS1)				Sample: GG04129-01		Prepared: 07/26/23 Analyzed: 07/28/23			
Boron	23800	ug/L	Q4	555.6	23500	68	75-125		
Calcium	212	mg/L	Q4	5.556	211	22	75-125		
Magnesium	102	mg/L	Q4	5.556	98.9	53	75-125		
Potassium	12.9	mg/L		5.556	7.69	94	75-125		
Sodium	173	mg/L	Q4	5.556	173	6	75-125		
Matrix Spike Dup (B339564-MSD1)				Sample: GG04129-01		Prepared: 07/26/23 Analyzed: 07/28/23			
Boron	24200	ug/L	Q4	555.6	23500	129	75-125	1	20
Calcium	211	mg/L	Q4	5.556	211	NR	75-125	0.6	20
Magnesium	101	mg/L	Q4	5.556	98.9	42	75-125	0.6	20
Potassium	12.8	mg/L		5.556	7.69	93	75-125	0.6	20
Sodium	173	mg/L	Q4	5.556	173	NR	75-125	0.3	20
<u>Batch B339593 - IC No Prep - EPA 300.0 REV 2.1</u>									
Matrix Spike (B339593-MS1)				Sample: GG04129-01		Prepared & Analyzed: 07/25/23			
Sulfate	1.00E9	mg/L	Q4	1.500	391	NR	80-120		
Chloride	1.0E9	mg/L	Q4	1.500	330	NR	80-120		
Matrix Spike (B339593-MS2)				Sample: GG04129-11		Prepared & Analyzed: 07/25/23			
Chloride	1.0E9	mg/L	Q4	1.500	18	NR	80-120		
Fluoride	1.85	mg/L		1.500	0.230	108	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	150	NR	80-120		
Matrix Spike Dup (B339593-MSD1)				Sample: GG04129-01		Prepared & Analyzed: 07/25/23			
Chloride	1.0E9	mg/L	Q4	1.500	330	NR	80-120	0	20
Sulfate	1.00E9	mg/L	Q4	1.500	391	NR	80-120	0	20
Matrix Spike Dup (B339593-MSD2)				Sample: GG04129-11		Prepared & Analyzed: 07/25/23			
Fluoride	1.85	mg/L		1.500	0.230	108	80-120	0.04	20
Sulfate	1.00E9	mg/L	Q4	1.500	150	NR	80-120	0	20
Chloride	1.0E9	mg/L	Q4	1.500	18	NR	80-120	0	20
<u>Batch B339705 - SW 3015 - EPA 6020A</u>									
Blank (B339705-BLK1)				Prepared: 07/27/23 Analyzed: 08/09/23					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (B339705-BLK1)				Prepared: 07/27/23 Analyzed: 08/08/23					
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B339705-BS1)				Prepared: 07/27/23 Analyzed: 08/09/23					
Boron	526	ug/L		555.6		95	80-120		
Calcium	5.59	mg/L		5.556		101	80-120		
Magnesium	5.81	mg/L		5.556		105	80-120		
Potassium	6.05	mg/L		5.556		109	80-120		
Sodium	5.69	mg/L		5.556		102	80-120		
Matrix Spike (B339705-MS1)				Sample: GG04417-01		Prepared: 07/27/23 Analyzed: 08/09/23			
Boron	826	ug/L	Q1	555.6	472	64	75-125		
Calcium	290	mg/L	Q4	5.556	289	18	75-125		
Magnesium	189	mg/L	Q4	5.556	179	173	75-125		
Potassium	30.8	mg/L		5.556	24.5	113	75-125		
Sodium	10.7	mg/L		5.556	5.57	93	75-125		
Matrix Spike Dup (B339705-MSD1)				Sample: GG04417-01		Prepared: 07/27/23 Analyzed: 08/09/23			
Boron	770	ug/L	Q2	555.6	472	54	75-125	7	20
Calcium	285	mg/L	Q4	5.556	289	NR	75-125	2	20
Magnesium	191	mg/L	Q4	5.556	179	205	75-125	0.9	20
Potassium	31.3	mg/L		5.556	24.5	123	75-125	2	20
Sodium	10.6	mg/L		5.556	5.57	90	75-125	1	20
<u>Batch B339730 - IC No Prep - EPA 300.0 REV 2.1</u>									
Matrix Spike (B339730-MS1)				Sample: GG04417-01		Prepared & Analyzed: 07/26/23			
Chloride	4.5	mg/L		1.500	2.8	115	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	347	NR	80-120		
Matrix Spike Dup (B339730-MSD1)				Sample: GG04417-01		Prepared & Analyzed: 07/26/23			
Sulfate	1.00E9	mg/L	Q4	1.500	347	NR	80-120	0	20
Chloride	4.4	mg/L		1.500	2.8	113	80-120	0.9	20
<u>Batch B339834 - No Prep - SM 2540C</u>									
Blank (B339834-BLK1)				Prepared & Analyzed: 07/28/23					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B339834-BS1)				Prepared & Analyzed: 07/28/23					
Solids - total dissolved solids (TDS)	963	mg/L		1000		96	84.9-109		
Duplicate (B339834-DUP1)				Sample: GG04129-01		Prepared & Analyzed: 07/28/23			
Solids - total dissolved solids (TDS)	1760	mg/L			1840			4	5
Duplicate (B339834-DUP2)				Sample: GG04129-11		Prepared & Analyzed: 07/28/23			
Solids - total dissolved solids (TDS)	630	mg/L			635			0.8	5
<u>Batch B339934 - No Prep - SM 2540C</u>									
Blank (B339934-BLK1)				Prepared & Analyzed: 08/01/23					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B339934-BS1)				Prepared & Analyzed: 08/01/23					
Solids - total dissolved solids (TDS)	993	mg/L		1000		99	84.9-109		
Duplicate (B339934-DUP1)				Sample: GG04417-01		Prepared & Analyzed: 08/01/23			
Solids - total dissolved solids (TDS)	980	mg/L			960			2	5



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Duplicate (B339934-DUP2) Sample: GG04417-11 Prepared & Analyzed: 08/01/23									
Solids - total dissolved solids (TDS)	785	mg/L	M		810			3	5
Batch B340448 - No Prep - SM 2320B 1997									
Duplicate (B340448-DUP1) Sample: GG04129-01 Prepared & Analyzed: 08/04/23									
Alkalinity - bicarbonate as CaCO ₃	525	mg/L			525			0	10
Alkalinity - carbonate as CaCO ₃	< 10	mg/L			ND				10
Duplicate (B340448-DUP2) Sample: GG04129-11 Prepared & Analyzed: 08/04/23									
Alkalinity - carbonate as CaCO ₃	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO ₃	400	mg/L			388			3	10
Duplicate (B340448-DUP3) Sample: GG04129-14 Prepared & Analyzed: 08/04/23									
Alkalinity - bicarbonate as CaCO ₃	500	mg/L			488			3	10
Alkalinity - carbonate as CaCO ₃	< 10	mg/L			ND				10
Duplicate (B340448-DUP4) Sample: GG04417-01 Prepared & Analyzed: 08/04/23									
Alkalinity - carbonate as CaCO ₃	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO ₃	400	mg/L			362			10	10
Batch B343272 - IC No Prep - EPA 300.0 REV 2.1									
Matrix Spike (B343272-MS1) Sample: GI01375-01 Prepared & Analyzed: 09/07/23									
Fluoride	1.76	mg/L		1.500	0.165	106	80-120		
Chloride	1.0E9	mg/L	Q4	1.500	13	NR	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	417	NR	80-120		
Matrix Spike Dup (B343272-MSD1) Sample: GI01375-01 Prepared & Analyzed: 09/07/23									
Sulfate	1.00E9	mg/L	Q4	1.500	417	NR	80-120	0	20
Chloride	1.0E9	mg/L	Q4	1.500	13	NR	80-120	0	20
Fluoride	1.70	mg/L		1.500	0.165	102	80-120	3	20
Batch B343644 - No Prep - SM 2540C									
Blank (B343644-BLK1) Prepared & Analyzed: 09/13/23									
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B343644-BS1) Prepared & Analyzed: 09/13/23									
Solids - total dissolved solids (TDS)	953	mg/L		1000		95	84.9-109		
Batch B343702 - No Prep - SM 2320B 1997									
Duplicate (B343702-DUP1) Sample: GI01375-01 Prepared & Analyzed: 09/13/23									
Alkalinity - bicarbonate as CaCO ₃	512	mg/L			500			2	10
Alkalinity - carbonate as CaCO ₃	< 10	mg/L			ND				10
Batch B343765 - SW 3015 - EPA 6020A									
Blank (B343765-BLK1) Prepared: 09/14/23 Analyzed: 09/19/23									
Boron	< 10	ug/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B343765-BS1) Prepared: 09/14/23 Analyzed: 09/19/23									
Boron	547	ug/L		555.6		98	80-120		
Magnesium	5.81	mg/L		5.556		105	80-120		
Potassium	5.58	mg/L		5.556		100	80-120		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
LCS (B343765-BS1)				Prepared: 09/14/23 Analyzed: 09/18/23					
Sodium	5.73	mg/L		5.556		103	80-120		
Matrix Spike (B343765-MS1)				Sample: GI01375-01 Prepared: 09/14/23 Analyzed: 09/19/23					
Boron	867	ug/L		555.6	328	97	75-125		
Matrix Spike Dup (B343765-MSD1)				Sample: GI01375-01 Prepared: 09/14/23 Analyzed: 09/19/23					
Boron	858	ug/L		555.6	328	95	75-125	1	20
<u>Batch B344570 - SW 3015 - EPA 6020A</u>									
Blank (B344570-BLK1)				Prepared & Analyzed: 09/25/23					
Calcium	< 0.20	mg/L							
LCS (B344570-BS1)				Prepared & Analyzed: 09/25/23					
Calcium	5.56	mg/L		5.556		100	80-120		



NOTES

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

* Not a TNI accredited analyte

Certifications

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

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

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

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

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

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

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

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

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

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

USEPA DMR-QA Program

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

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

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

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

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

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.
- 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



SAR-3: Episodic Depth to Groundwater Measurements

All DTWs on SAR-3 must be collected within 24 hours.

Plant: DC
Event: DC-23Q3 Rev 0

Well	Unique ID	Unit Num1	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
BA01C	DC-BA01!C	205	BAB	7/17/23	1428	14.90		KL
BA01L	DC-BA01!L	205	BAB		1425	15.29		KL
G02L	DC-G02!L	204	LF		0941	12.22		SD
G02D	DC-G02&D	204	LF		0944	22.04	TD = 68.48'	SD
G03L	DC-G03!L	204	LF		0934	8.68	TD = 26.80'	SD
G03S	DC-G03#S	204	LF		0929	8.33		SD
G04L	DC-G04!L	204	LF		1327	15.42	dry	NW
G04S	DC-G04#S	204	LF		1329	18.27		NW
G06L	DC-G06!L	204	LF		1232	21.80		SD
G06S	DC-G06#S	204	LF		1230	22.02		SD
G07L	DC-G07!L	204	LF		1222	21.12		SD
G08L	DC-G08!L	204	LF		1216	20.68		SD
G09L	DC-G09!L	204	LF		1207	20.75		SD
G09S	DC-G09#S	204	LF		1210	20.63		SD
G12L	DC-G12!L	204	LF		1139	21.67		SD
G12S	DC-G12#S	204	LF		1141	22.72		SD
G14L	DC-G14!L	204	LF		1106	24.02	TD = 26.86	SD
G15L	DC-G15!L	204	LF		1050	30.85		SD
G15S	DC-G15#S	204	LF		1047	31.19		SD
G16L	DC-G16!L	204	LF		1042	29.41		SD
G50L	DC-G50!L	203	GMF		1036	12.52		KL
G51L	DC-G51!L	203	GMF		1522	15.75		SD
G52L	DC-G52!L	203	GMF		1515	26.38		SD

SAR-3: Episodic Depth to Groundwater Measurements

All DTWs on SAR-3 must be collected within 24 hours.

Plant: DC

Event: DC-23Q3 Rev 0

Well	Unique ID	Unit Num	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
G52S	DC-G52#S	203	GMF	7/17/23	15:16	31.00		JD
G53L	DC-G53!L	203	GMF		11:56	11.98		KL
G53S	DC-G53#S	203	GMF		11:59	13.70		KL
G55L	DC-G55!L	203	GMF		15:32	19.38		JD
G55S	DC-G55#S	203	GMF		15:31	19.18		JD
G56L	DC-G56!L	203	GMF		9:36	18.15	TD = 25.43	KL
G56S	DC-G56#S	203	GMF		9:33	18.55		KL
G57L	DC-G57!L	203	GMF		9:47	22.35	TD = 29.28	KL
G58L	DC-G58!L	203	GMF		9:51	26.56	TD = 33.81	KL
G58S	DC-G58#S	203	GMF		9:54	26.59		KL
G59L	DC-G59!L	203	GMF		9:57	25.54	TD = 35.32	KL
G59S	DC-G59#S	203	GMF		9:59	33.85		KL
G61S	DC-G61#S	203	GMF		10:14	19.28		KL
G62L	DC-G62!L	203	GMF		10:19	20.79	TD = 33.52	KL
G63L	DC-G63!L	203	GMF		10:22	23.60	TD = 31.02	KL
G63S	DC-G63#S	203	GMF		10:26	24.34		KL
G65L	DC-G65!L	203	GMF		12:35	18.21	TD = 25.16	NW
G65S	DC-G65#S	203	GMF		10:31	18.52		NW
G66L	DC-G66!L	203	GMF		10:45	12.35		NW
G66S	DC-G66#S	203	GMF		10:46	13.01		NW
G67L	DC-G67!L	203	GMF		10:55	11.45		NW
G67S	DC-G67#S	203	GMF		10:58	12.33		NW
G68L	DC-G68!L	203	GMF		11:41	11.97		NW

SAR-3: Episodic Depth to Groundwater Measurements

All DTWs on SAR-3 must be collected within 24 hours.

Plant: DC

Event: DC-23Q3 Rev 0

Well	Unique ID	Unit Num	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
G68S	DC-G68#S	203	GMF	7/17/23	1148	12.85		NW
G69L	DC-G69!L	203	GMF		0941	13.80	TD = 27.86	NW
G69S	DC-G69#S	203	GMF		0933	16.96		NW
G70L	DC-G70!L	203	GMF		0949	16.54		NW
G71L	DC-G71!L	203	GMF		1000	23.71	TD = 32.96	NW
G71S	DC-G71#S	203	GMF		0955	24.48		NW
G72L	DC-G72!L	203	GMF		1005	22.40	TD = 28.02	NW
G73L	DC-G73!L	203	GMF		1025	25.53		NW
L103	DC-L103	204	LF		1515	1.10		AP
OM05S	DC-OM05#S	201-202	AP1/2		1403	18.00	TD = 25.70	AP
OM08	DC-OM08	201-202	AP1/2		1348	14.85	TD = 26.94	AP
OM09	DC-OM09	201-202	AP1/2		1259	4.18		AP
OM10	DC-OM10	201-202	AP1/2		1100	-	not safe to access	AP
OM15	DC-OM15	201-202	AP1/2		1437	21.60	TD = 51.17	AP
OM22S	DC-OM22#S	201-202	AP1/2		1057	41.79 19.31		BG
OM23S	DC-OM23#S	201-202	AP1/2		1235	57.95 41.79	TD = 46.10	AP
OM25D	DC-OM25&D	201-202	AP1/2		1317	48.62 57.95	TD = 77.39	AP
OR03S	DC-OR03#S	201-202	AP1/2		1045	21.65 48.62		BG
OR05D	DC-OR05&D	201-202	AP1/2		1400	16. 21.65	TD = 49.74	AP
OR14S	DC-OR14#S	201-202	AP1/2		1337	6.82	TD = 24.33	AP
OR18	DC-OR18	201-202	AP1/2		0943	17.32	TD = 53.10	AP
P01L	DC-P01!L	204	LF		0951	10.38	TD = 23.35'	JD
P01S	DC-P01#S	204	LF		0954	10.13	TD = 29.71'	JD

SAR-3: Episodic Depth to Groundwater Measurements

All DTWs on SAR-3 must be collected within 24 hours.

Plant: DC
Event: DC-23Q3 Rev 0

Well	Unique ID	Unit Numt	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
P01I	DC-P01\$I	204	LF	7/17/23	1005	10.05	TD = 46.95	JD
P02S	DC-P02#S	204	LF		1523	14.89	TD = 91.94	JD
P04S	DC-P04#S	204	LF		1329	18.27		JD
P05L	DC-P05!L	204	LF		1335	3.11	TD = 14.92'	JD
P05S	DC-P05#S	204	LF		1337	3.28		JD
P05D	DC-P05&D	204	LF		1339	6.30	TD = 46.10'	JD
P36L	DC-P36!L	204	LF		1306 1024	6.96 11.17	TD = 15.09' to 7/17/23	JD
P36S	DC-P36#S	204	LF		1302	11.33	TD = 31.43'	JD
P36D	DC-P36&D	204	LF		1310	11.57	TD = 51.38	JD
P37L	DC-P37!L	204	LF		1203	13.64		JD
P37D	DC-P37&D	204	LF		1306	15.59		KL
P38L	DC-P38!L	204	LF		1059	17.95	TD = 19.75	JD
P38S	DC-P38#S	204	LF		1057	17.30	TD = 31.42'	JD
P39L	DC-P39!L	204	LF		1024	6.96	TD = 15.09'	JD
P39S	DC-P39#S	204	LF		1031	7.14	TD = 26.25'	JD
P39D	DC-P39&D	204	LF		1028	13.75	TD = 43.58'	JD
P40L	DC-P40!L	204	LF		1359	10.28	TD = 20.44'	JD
P40S	DC-P40#S	204	LF		1401	9.54	TD = 35.42'	JD
P41L	DC-P41!L	204	LF		1117	6.90	TD = 12.00'	JD
P41S	DC-P41#S	204	LF		1119	9.51		KL
P41D	DC-P41&D	204	LF		1123	35.40		KL
P42L	DC-P42!L	204	LF		1216	5.88	TD = 24.30 well is knocked over	NW
P42S	DC-P42#S	204	LF		1218	5.93	TD = 31.47	NW

SAR-3: Episodic Depth to Groundwater Measurements

All DTWs on SAR-3 must be collected within 24 hours.

Plant: DC
Event: DC-23Q3 Rev 0

Well	Unique ID	Unit Num	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
P42I1	DC-P42\$I1	204	LF	7/17/23	1536	6.02	TD = 42.22	KL
P42I2	DC-P42\$I2	204	LF		1534	32.42	TD = 57.30	KL
P42D	DC-P42&D	204	LF		1221	37.62	TD = 77.07	NW
P52	DC-P52	203	GMF		1514	14.82	TD = 28.26	KL
P57L	DC-P57!L	203	GMF		1517	22.32	TD = 29.27	KL
P57S	DC-P57#S	203	GMF		1520	22.08		KL
P60	DC-P60	203	GMF		1010	24.54	TD = 37.30	KL
P61	DC-P61	203	GMF		1053	10.00	TD = 21.53	KL
P62	DC-P62	203	GMF		1050	10.55	TD = 19.11	KL
P63	DC-P63	203	GMF		1048	14.17	TD = 20.46	KL
P64	DC-P64	203	GMF		1103	14.71	TD = 18.92	KL
R10L	DC-R10!L	204	LF		1154	21.93	27.45' = TD	JD
R11L	DC-R11!L	204	LF		1145	21.37	26.89' = TD ^{5-6x} bottom	JD
R13L	DC-R13!L	204	LF		1131	21.10	29.88' = TD	JD
R61L	DC-R61!L	203	GMF		1528	19.00	31.45' = TD	KL
R72S	DC-R72#S	203	GMF		1010	22.26	TD = 37.77	NW
T43L	DC-T43!L	204	LF		1238	6.69		JD
T44L	DC-T44!L	204	LF		1243	11.00		JD
T45L	DC-T45!L	204	LF		1246	8.96		JD
T46L	DC-T46!L	204	LF		1258	7.00		JD
X301	DC-X301-leachate	203	GMF		NA	NA	NA	
XTPW02	DC-XTPW02-pore	203	GMF		1530	6.99	Dry	AP

U:6/19/23 GKJ

SAR-3: Episodic Depth to Groundwater Measurements

All DTWs on SAR-3 must be collected within 24 hours.

Plant: DC
Event: DC-23Q3 Rev 0

Well	Unique ID	Unit Numt	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
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SAR-4: Depth to Groundwater Measurements - On-site Transducer Downloads
All DTWs on SAR-4 form may be collected at anytime during the sampling event.

Plant: DC

Event: DC-23Q3 Rev 0

Well	Unique ID	Unit Number	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	On-site Transducer Data					Comments	Initials
							Data Logger Serial No.	Does Data Match?	WL Reading on Transducer (ft)	Data downloaded?	Batt (H/M/L)		
BA01	DC-BA01	205	BAB	7/24/23	1105	15.79	21615533	yes	174.21	Y	M		KL
BA02	DC-BA02	205	BAB	7/25/23	1111	12.02	21615636	yes	506.	Y	H	batteries replaced	JR
BA02L	DC-BA02IL	205	BAB	7/24	1056	Dry	21615682	yes	173.38	Y	H		KL
BA03	DC-BA03	205	BAB	7/31/23	1340	10.48	21615637	yes	578.34	Y	H		JR
BA03L	DC-BA03IL	205	BAB	7/24	1009	Dry	21615687	yes	173.24	Y	M		KL
BA04	DC-BA04	205	BAB	7/24/23	1249	6.99	21615631	yes	573.67	Y	H		JR
BA05	DC-BA05#	205	BAB	7/31/23	1332	21.36	21615540	yes	572.81	Y	H		JR
BA06	DC-BA06	205	BAB	7/24/23	1534	25.04	21615525	yes	173.93	Y	H		KL
G02S	DC-G02#S	204	LF	7/25/23	1316	10.47	21615554	yes	611.07	Y	M		JR
G50S	DC-G50#S	203	GMF	7/27	1314	15.44	21615535	yes	185.41	Y	H		KL
G51S	DC-G51#S	203	GMF	7/31	1332	15.33	21615691	yes	183.18	Y	H		KL
G54L	DC-G54IL	203	GMF	7/31	1341	22.37	21615690	yes	183.09	Y	H		KL
G54S	DC-G54#S	203	GMF	7/31	1337	23.56	21615684	yes	182.72	Y	H		KL
G57S	DC-G57#S	203	GMF	7/31	1347	22.26	21615683	yes	182.88	Y	H		KL
G60L	DC-G60IL	203	GMF	7/31	1354	12.20	21615678	yes	183.39	Y	H		KL
G60S	DC-G60#S	203	GMF	7/31	1351	24.63	21615677	yes	179.73	Y	H		KL
G64L	DC-G64IL	203	GMF	7/31	1358	22.83	21615688	yes	190.29	Y	H		KL
G64S	DC-G64#S	203	GMF	7/25/23	1504	24.18	21615632	yes	600.32	Y	H		JR

SAR-4: Depth to Groundwater Measurements - On-site Transducer Downloads
All DTWs on SAR-4 form may be collected at anytime during the sampling event.
 Plant: DC
 Event: DC-23Q3 Rev 0

Well	Unique ID	Unit Number	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	Data Logger Serial No.	Does Data Match? Serial No. Logger	W/L Reading on Transducer (ft)	Data downloaded?	Batt (H/M/L)	Comments	Initials
OM01	DC-OM01	201-AP1/ 202 2	AP1/	7/20/23	10:19	12.06	21615685	yes	583.4573	yes	H	TD-22.83	App
OM04S	DC-OM04#S	201-AP1/ 202 2	AP1/	7/25/23	10:50	20.00	21615542	yes	587.37	yes	H	TD-35.88	JD
OM07	DC-DM07	201-AP1/ 202 2	AP1/	7/26/23	10:45	12.41	21615541	yes	584.12	yes	H	TD-29.97	JD
OM12	DC-OM12	201-AP1/ 202 2	AP1/	7/27/23	15:11	17.34	21615527	yes	176.17	yes	H		KL
OM16	DC-OM16	201-AP1/ 202 2	AP1/	7/24/23	11:30	24.50	21615539	yes	580.61	yes	H	TD-43.60	SD
OM17	DC-OM17	201-AP1/ 202 2	AP1/	7/24/23	13:30	13.66	21615693	yes	---	yes	H	replaced battery	SD
OM21	DC-OM21	201-AP1/ 202 2	AP1/	7/19/23	15:27	10.80	21615593	yes	11.3153	yes	H	TD-60.57	App
OM22D	DC-OM22&D	201-AP1/ 202 2	AP1/	7/19/23	11:05	18.85	21615592	yes	580.0543	yes	H	TD-65.074	App
OM23D	DC-OM23&D	201-AP1/ 202 2	AP1/	7/27/23	12:22	38.54	21615591	yes	39.76	yes	M		JR
OM24D	DC-OM24&D	201-AP1/ 202 2	AP1/	7/27/23	12:30	41.90	21615522	yes	broken	NO	---	broken/called Informal Grab	JR
OM25S	DC-OM25#S	201-AP1/ 202 2	AP1/	7/26/23	12:51	57.96	21615681	yes	570.79	yes	H		JD
OR02	DC-OR02	201-AP1/ 202 2	AP1/	7/20/23	12:42	6.19	21615679	yes	595.0210	yes	H	TD-22.28	App
OR03D	DC-OR03&D	201-AP1/ 202 2	AP1/	7/10/23	14:10	44.44	21615577	yes	583.1447	yes	H	TD	App
OR04D	DC-OR04&D	201-AP1/ 202 2	AP1/	7/25/23	10:47	21.21	21615570	yes	586.37	yes	H	TD-68.01	JD
OR06A	DC-OR06/A	201-AP1/ 202 2	AP1/	7/26/23	12:02	14.07	21615692	yes	581.23	yes	H	TD-25.65	JD
OR11	DC-OR11	201-AP1/ 202 2	AP1/	7/25/23	10:00	31.84	21615686	yes	564.59	yes	H	TD-46.03	JD
OR13S	DC-OR13#S	201-AP1/ 202 2	AP1/	7/31/23	13:55		21615676	yes	588.75	yes	M		JR
OR13D	DC-OR13&D	201-AP1/ 202 2	AP1/	7/26/23	7:42		21564135	yes	589.15	yes	H		JR

SAR-4: Depth to Groundwater Measurements - On-site Transducer Downloads
All DTWs on SAR-4 form may be collected at anytime during the sampling event.

Plant: DC
Event: DC-23Q3 Rev 0

Well	Unique ID	Unit Number	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	On-site Transducer Data					Comments	Initials
							Data Logger Serial No.	Does Data Match?	WL Reading on Transducer (ft)	Data downloaded?	Batt (H/M/L)		
OR14D	DC-OR148D	201-202	AP1/2	7/24/23	1431	10.52	21615611	yes	588.34	x	H		
OR19	DC-OR19	201-202	AP1/2	7/31/23	1210	25.99	21615634	yes	571.76	y	H		JR
OR20	DC-OR20	201-202	AP1/2	07/24/23	0936	21.95	21615610	yes	-565.1	y	H	TD=57.55	JO

U: 6/21/23 GKJ

Duck Creek

WELL/SAMPLE POINT **BA01**

Purge Method: LOW-FLOW

Date: 7-24-23 Start Time: 11:16 Finish/Sample Time: 13:25

Well Depth (Bottom) From MP: PUMP ft Min. Purge Volume: 1.0 Gal / L / mL

Depth to Water From MP: 15.79 ft Total Purge Volume: 1.3 Gal / L / mL

Water Column Length: ft

Well Water Volume: Gal / L

Total Drawdown: 0.12 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	11:38	15.84	100	6.73	977	18.97	33	3.64	23.1
2	11:39	15.83	100	6.67	993	18.86	30	3.48	21.2
3	11:40	15.84	100	6.67	982	18.80	26	3.35	19.1
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)
3430	TOC (A,V 40mL, H2SO4)
	TOX (A,G 500mL, H2SO4)
1+1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1+1	General (P, 500 mL)
	Ammonia (P, 250mL, H2SO4)
1+1	Rad (P, 2.5L, HNO3)

Filtered	
Qty	Bottles
1+1	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1+1	General (P,500mL)
3+3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron - 1.411 mg/L

Final DTW: 15.91 ft

Comments FD were gaged

Sampler's Signature: [Signature]

Duck Creek

WELL/SAMPLE POINT **BA02**

Purge Method: dedicated pump

Date: 7/25/23 Start Time: 11:15 Finish/Sample Time: 12:47

Well Depth (Bottom) From MP: 20.44 ft Min. Purge Volume: 1.0 Gal 1 mL

Depth to Water From MP: 12.02 ft Total Purge Volume: 1.5 Gal 1 mL

Water Column Length: 8.42 ft

Well Water Volume: 5.10 Gal 1 Total Drawdown: 2.73 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	11:38	13.43	100	6.79	750.41	19.79	-34.0	1.05	38.60
2	11:40	13:50	100	6.79	720.58	19.75	-30.5	1.08	32.60
3	11:42	13:51	100	6.79	740.64	19.65	-25.9	1.84	37.34
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)
3	TOC (A,V 40mL, H2SO4)
	TOX (A,G 500mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 500 mL) 1L
	Ammonia (P, 250mL, H2SO4)
1	Rad (P, 2.5L, HNO3)

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P, 500 mL) 1L
3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron - 3.509 mg/L

Final DTW: 14.75 ft

Comments

Sampler's Signature: Michael Wilson

WELL/SAMPLE POINT **BA02L**

Purge Method: **low-flow**

Date: **7-24-23** Start Time: **13:40** Finish/Sample Time: **1345**

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

Depth to Water From MP: **JR 12.03 ft water below pump** Total Purge Volume: **—** Gal / L / mL

Water Column Length: **—** ft **PUMP**

Well Water Volume: **—** Gal / L Total Drawdown: **—** ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1			1.00						
2			1.00						
3			1.00						
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: **—**

Sample Appearance:

Odor: ☐ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

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

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)
	TOC (A,V, 40mL, H2SO4)

Ferrous Iron - **NA** mg/L

Final DTW: **—** ft

Comments **Insufficient water for sample**

Sampler's Signature: **Joseph A. Reed**

WELL/SAMPLE POINT **BA03**

Purge Method: Bladder Pump

Date: 7/24/23 Start Time: 1105 Finish/Sample Time: 1206

Well Depth (Bottom) From MP: ft Min. Purge Volume: 1.0 Gal (L) mL

Depth to Water From MP: 10.48 ft Total Purge Volume: 1.3 Gal (L) mL

Water Column Length: ft

Well Water Volume: 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	1105	10.51	100	6.86	806.49	18.76	8.0	0.61	69.83
2	1101	10.51	100	6.89	800.31	18.65	9.2	0.50	72.02
3	1102	10.52	100	6.89	798.91	18.63	11.1	0.42	81.91
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

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

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
<u>2</u>	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)
3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron - 0.287 mg/L

Final DTW: 10.97 ft

Comments Changed Batteries in transducer

Sampler's Signature: Joseph R Paul

BC

WELL/SAMPLE POINT **BA03L**

Purge Method: bladder pump

Date: 7/24/23 Start Time: 1009 Finish/Sample Time: 1010

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

Depth to Water From MP: water below pump Total Purge Volume: — Gal / L / mL

Water Column Length: — ft

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

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1									
2									
3									
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: —

Sample Appearance:

Odor: ☐ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

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

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)
	TOC (A,V, 40mL, H2SO4)

Ferrous Iron - NA mg/L

Final DTW: — ft

Comments No water to pump

Sampler's Signature: Joseph Reed

WELL/SAMPLE POINT **BA04**

Purge Method: Bladder

Date: 7/24/23 Start Time: 12 49 Finish/Sample Time: 1406

Well Depth (Bottom) From MP: — ft Min. Purge Volume: 1.0 Gal / L / mL

Depth to Water From MP: 6.99 ft Total Purge Volume: 1.3 Gal / L / mL

Water Column Length: — ft

Well Water Volume: — Gal / L Total Drawdown: 0.09 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	1304	7.03	100	6.71	1131.4	18.05	142.9	0.48	29.18
2	1305	7.03	100	6.72	1125.7	18.06	139.1	0.40	30.79
3	1306	7.03	100	6.71	1128.8	17.98	138.1	0.42	39.11
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: ATI 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)
3	TOC (A,V 40mL, H2SO4)
	TOX (A,G 500mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 500 mL) <u>1000 mL</u>
	Ammonia (P, 250mL, H2SO4)
1	Rad (P, 2.5L, HNO3)

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)
3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron - 0.412 mg/L

Final DTW: 7.08 ft

Comments Replaced dead batteries - no data to download

Sampler's Signature: Joseph R. Reed

WELL/SAMPLE POINT **BA05**

Purge Method: Bladder

Date: 7/24/23 Start Time: 1420 Finish/Sample Time: 1552

Well Depth (Bottom) From MP: ft Min. Purge Volume: 1.0 Gal ① mL

Depth to Water From MP: 21.36 ft Total Purge Volume: 1.3 Gal ① mL

Water Column Length: ft

Well Water Volume: Gal / L Total Drawdown: 4.74 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	23.05	100	6.79	1576.2	14.57	-48.7	0.54	75.33
2	1440	23.05	100	6.79	1589.1	14.56	-50.9	0.47	54.57
3	1441	23.05	109	6.79	1591.5	14.57	-51.4	0.45	52.72
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

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

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)
3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron - 5.463 mg/L

Final DTW: 26.10 ft

Comments

Sampler's Signature: Joseph R Reed

WELL/SAMPLE POINT **BA06**

Purge Method: LOW FLOW

Date: 7/24/23 Start Time: 14:21 Finish/Sample Time: 15:34

Well Depth (Bottom) From MP: PUMP ft Min. Purge Volume: 1.0 Gal / L / mL

Depth to Water From MP: 25.04 ft Total Purge Volume: 1.3 Gal / L / mL

Water Column Length: ft

Well Water Volume: Gal / L

Total Drawdown: 5.94 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	14:34	26.78	100	6.56	3,140	18.78	-28	2.73	5.5
2	14:35	26.85	100	6.53	3,110	18.81	-34	2.61	4.8
3	14:36	27.10	100	6.54	3,140	18.70	-40	2.50	5.3
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

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

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)
3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron - Over Range mg/L

Final DTW: 30.98 ft

Comments NA

Sampler's Signature: [Signature]

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

Page: 6 of 735

CHAIN-OF-CUSTODY / Analytical Request Document

Page: 7 of 7

Section A Required Client Information		Section B Required Project Information		Section C Invoice Information		Page: 7 of 7	
Company: Vistra Corp		Report To: Brian Voelker		Attention: Jason Stuckey		REGULATORY AGENCY	
Address: 13498 E. 900th St		Copy To: Jason Stuckey		Company Name: Vistra Corp			
				Address: see Section A		NPDES GROUND WATER DRINKING WATER	
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No:		Quote Reference:		UST RCRA OTHER	
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager:		Site Location:	
Requested Due Date/TAT: 10 day		Project Number: 2285		Profile #:		STATE: IL	
						6604417	

[illegible]

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: Joe Reed					
SIGNATURE of SAMPLER: [Signature]	DATE Signed (MM/DD/YY): 7/25/23				

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

37



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

January 02, 2024

Daryl Johnson
Vistra - Duck Creek
17751 North Cilco Road
Canton, IL 61520-8761

Dear Daryl Johnson:

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,

A handwritten signature in cursive script, appearing to read "Diane Billings".

Diane Billings
Project Manager



SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order GJ03182

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



Work Order GJ03497

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



Work Order GJ03740

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



Work Order GK00649

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
YES	Case narrative provided



Case Narrative

BA02L, G02L, G04L, G07L, G08L, B09L, G14L, G15L, G51L, OM17, P60, R10L, R11L, XTPW02 were dry. G52S could not be sampled. OMO1 was sampled but had limited volume. Dissolved metals and ferrous iron are not reported. There is no access point to take DTW for X301. We do not have L103 GWEinformation and can't measure BMP at this location.



APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT, BOTTOM ASH BASIN
DC-257-205

Pace Analytical Services, LLC

2231 W. Altorfer Drive

Peoria, IL 61615

(800)752-6651



ANALYTICAL RESULTS

Sample: GJ03182-01
Name: BA03
Matrix: Ground Water - Grab

Sampled: 10/17/23 12:19
Received: 10/17/23 16:51
PO #: 1728919

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	5.3	mg/L		10/18/23 12:46	1	1.0	10/18/23 12:46	CRD	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		10/18/23 12:46	1	0.250	10/18/23 14:16	CRD	EPA 300.0 REV 2.1
Sulfate	14	mg/L	Q4	10/18/23 14:16	5	5.0	10/18/23 14:16	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	11.05	Feet		10/17/23 12:19	1		10/17/23 12:19	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		10/17/23 12:19	1		10/17/23 12:19	FIELD	Field*
Oxidation Reduction Potential	88.0	mV		10/17/23 12:19	1	-500	10/17/23 12:19	FIELD	Field*
pH, Field Measured	6.49	pH Units		10/17/23 12:19	1		10/17/23 12:19	FIELD	Field*
Specific Conductance, Field Measured	813.0	umhos/cm		10/17/23 12:19	1		10/17/23 12:19	FIELD	Field*
Temperature, Field Measured	17.9	°C		10/17/23 12:19	1		10/17/23 12:19	FIELD	Field*
Temperature, Field Measured	64.2	°F		10/17/23 12:19	1		10/17/23 12:19	FIELD	Field*
Turbidity, Field Measured	0.800	NTU		10/17/23 12:19	1	0.00	10/17/23 12:19	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	440	mg/L		10/27/23 14:21	1	10	10/27/23 14:21	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		10/27/23 14:21	1	10	10/27/23 14:21	TMS	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	440	mg/L		10/19/23 13:29	1	26	10/19/23 15:14	OGS	SM 2540C
Total Metals - PIA									
Boron	16	ug/L		10/19/23 08:58	5	10	10/20/23 13:18	TJJ	EPA 6020A
Calcium	100	mg/L		10/19/23 08:58	5	0.20	10/19/23 16:03	TJJ	EPA 6020A
Magnesium	53	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:03	TJJ	EPA 6020A
Potassium	0.73	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:03	TJJ	EPA 6020A
Sodium	7.3	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:03	TJJ	EPA 6020A



ANALYTICAL RESULTS

Sample: GJ03182-02
Name: BA03L
Matrix: Ground Water - Grab

Sampled: 10/17/23 12:23
Received: 10/17/23 16:51
PO #: 1728919

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	12	mg/L		10/18/23 14:52	5	5.0	10/18/23 14:52	CRD	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		10/18/23 14:34	1	0.250	10/18/23 14:34	CRD	EPA 300.0 REV 2.1
Sulfate	390	mg/L		10/18/23 15:10	50	50	10/18/23 15:10	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	9.46	Feet		10/17/23 12:23	1		10/17/23 12:23	FIELD	Field*
Dissolved oxygen, Field	0.59	mg/L		10/17/23 12:23	1		10/17/23 12:23	FIELD	Field*
Oxidation Reduction Potential	111	mV		10/17/23 12:23	1	-500	10/17/23 12:23	FIELD	Field*
pH, Field Measured	6.36	pH Units		10/17/23 12:23	1		10/17/23 12:23	FIELD	Field*
Specific Conductance, Field Measured	1350	umhos/cm		10/17/23 12:23	1		10/17/23 12:23	FIELD	Field*
Temperature, Field Measured	64.9	°F		10/17/23 12:23	1		10/17/23 12:23	FIELD	Field*
Temperature, Field Measured	18.3	°C		10/17/23 12:23	1		10/17/23 12:23	FIELD	Field*
Turbidity, Field Measured	173	NTU		10/17/23 12:23	1	0.00	10/17/23 12:23	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	490	mg/L		10/27/23 14:21	1	10	10/27/23 14:21	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		10/27/23 14:21	1	10	10/27/23 14:21	TMS	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1200	mg/L		10/19/23 13:29	1	26	10/19/23 15:14	OGS	SM 2540C
Total Metals - PIA									
Boron	210	ug/L		10/19/23 08:58	5	10	10/20/23 12:32	TJJ	EPA 6020A
Calcium	200	mg/L		10/19/23 08:58	5	0.20	10/19/23 16:22	TJJ	EPA 6020A
Magnesium	110	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:22	TJJ	EPA 6020A
Potassium	0.75	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:22	TJJ	EPA 6020A
Sodium	11	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:22	TJJ	EPA 6020A



ANALYTICAL RESULTS

Sample: GJ03497-01
Name: BA01
Matrix: Ground Water - Grab

Sampled: 10/18/23 13:25
Received: 10/18/23 17:13
PO #: 1728919

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	15	mg/L	Q4	10/24/23 23:01	5	5.0	10/24/23 23:01	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		10/24/23 21:30	1	0.250	10/24/23 21:30	TMS	EPA 300.0 REV 2.1
Sulfate	160	mg/L	Q4	10/24/23 23:19	25	25	10/24/23 23:19	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	16.25	Feet		10/18/23 13:25	1		10/18/23 13:25	FIELD	Field*
Dissolved oxygen, Field	0.92	mg/L		10/18/23 13:25	1		10/18/23 13:25	FIELD	Field*
Oxidation Reduction Potential	-3.00	mV		10/18/23 13:25	1	-500	10/18/23 13:25	FIELD	Field*
pH, Field Measured	6.51	pH Units		10/18/23 13:25	1		10/18/23 13:25	FIELD	Field*
Specific Conductance, Field Measured	1020	umhos/cm		10/18/23 13:25	1		10/18/23 13:25	FIELD	Field*
Temperature, Field Measured	58.0	°F		10/18/23 13:25	1		10/18/23 13:25	FIELD	Field*
Temperature, Field Measured	14.4	°C		10/18/23 13:25	1		10/18/23 13:25	FIELD	Field*
Turbidity, Field Measured	3.20	NTU		10/18/23 13:25	1	0.00	10/18/23 13:25	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	400	mg/L		10/27/23 14:21	1	10	10/27/23 14:21	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		10/27/23 14:21	1	10	10/27/23 14:21	TMS	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	660	mg/L		10/24/23 11:18	1	26	10/24/23 13:47	CPS	SM 2540C
Total Metals - PIA									
Boron	30	ug/L		10/19/23 08:58	5	10	10/20/23 12:43	TJJ	EPA 6020A
Calcium	120	mg/L		10/19/23 08:58	5	0.20	10/19/23 16:34	TJJ	EPA 6020A
Magnesium	63	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:34	TJJ	EPA 6020A
Potassium	0.80	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:34	TJJ	EPA 6020A
Sodium	13	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:34	TJJ	EPA 6020A



ANALYTICAL RESULTS

Sample: GJ03497-02
Name: BA02
Matrix: Ground Water - Grab

Sampled: 10/18/23 14:34
Received: 10/18/23 17:13
PO #: 1728919

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	9.0	mg/L		10/24/23 23:55	5	5.0	10/24/23 23:55	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		10/24/23 23:37	1	0.250	10/24/23 23:37	TMS	EPA 300.0 REV 2.1
Sulfate	12	mg/L		10/24/23 23:55	5	5.0	10/24/23 23:55	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	12.82	Feet		10/18/23 14:34	1		10/18/23 14:34	FIELD	Field*
Dissolved oxygen, Field	6.9	mg/L		10/18/23 14:34	1		10/18/23 14:34	FIELD	Field*
Oxidation Reduction Potential	-41.0	mV		10/18/23 14:34	1	-500	10/18/23 14:34	FIELD	Field*
pH, Field Measured	6.71	pH Units		10/18/23 14:34	1		10/18/23 14:34	FIELD	Field*
Specific Conductance, Field Measured	940.0	umhos/cm		10/18/23 14:34	1		10/18/23 14:34	FIELD	Field*
Temperature, Field Measured	16.9	°C		10/18/23 14:34	1		10/18/23 14:34	FIELD	Field*
Temperature, Field Measured	62.4	°F		10/18/23 14:34	1		10/18/23 14:34	FIELD	Field*
Turbidity, Field Measured	11.1	NTU		10/18/23 14:34	1	0.00	10/18/23 14:34	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	480	mg/L		10/27/23 14:21	1	10	10/27/23 14:21	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		10/27/23 14:21	1	10	10/27/23 14:21	TMS	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	530	mg/L		10/24/23 11:18	1	26	10/24/23 13:47	CPS	SM 2540C
Total Metals - PIA									
Boron	55	ug/L		10/19/23 08:58	5	10	10/20/23 12:47	TJJ	EPA 6020A
Calcium	92	mg/L		10/19/23 08:58	5	0.20	10/19/23 16:38	TJJ	EPA 6020A
Magnesium	45	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:38	TJJ	EPA 6020A
Potassium	1.3	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:38	TJJ	EPA 6020A
Sodium	47	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:38	TJJ	EPA 6020A



ANALYTICAL RESULTS

Sample: GJ03497-05
Name: BA04
Matrix: Ground Water - Grab

Sampled: 10/18/23 15:40
Received: 10/18/23 17:13
PO #: 1728919

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	42	mg/L		10/25/23 00:31	25	25	10/25/23 00:31	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		10/25/23 00:13	1	0.250	10/25/23 00:13	TMS	EPA 300.0 REV 2.1
Sulfate	160	mg/L		10/25/23 00:31	25	25	10/25/23 00:31	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	7.69	Feet		10/18/23 15:40	1		10/18/23 15:40	FIELD	Field*
Dissolved oxygen, Field	3.6	mg/L		10/18/23 15:40	1		10/18/23 15:40	FIELD	Field*
Oxidation Reduction Potential	44.0	mV		10/18/23 15:40	1	-500	10/18/23 15:40	FIELD	Field*
pH, Field Measured	7.00	pH Units		10/18/23 15:40	1		10/18/23 15:40	FIELD	Field*
Specific Conductance, Field Measured	1130	umhos/cm		10/18/23 15:40	1		10/18/23 15:40	FIELD	Field*
Temperature, Field Measured	17.6	°C		10/18/23 15:40	1		10/18/23 15:40	FIELD	Field*
Temperature, Field Measured	63.7	°F		10/18/23 15:40	1		10/18/23 15:40	FIELD	Field*
Turbidity, Field Measured	2.50	NTU		10/18/23 15:40	1	0.00	10/18/23 15:40	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	420	mg/L		10/27/23 14:21	1	10	10/27/23 14:21	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		10/27/23 14:21	1	10	10/27/23 14:21	TMS	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	760	mg/L		10/24/23 11:18	1	26	10/24/23 13:47	CPS	SM 2540C
Total Metals - PIA									
Boron	1000	ug/L		10/19/23 08:58	5	10	10/20/23 12:51	TJJ	EPA 6020A
Calcium	140	mg/L		10/19/23 08:58	5	0.20	10/19/23 16:42	TJJ	EPA 6020A
Magnesium	69	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:42	TJJ	EPA 6020A
Potassium	1.2	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:42	TJJ	EPA 6020A
Sodium	18	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:42	TJJ	EPA 6020A



ANALYTICAL RESULTS

Sample: GJ03497-06
Name: BA01 DUP
Matrix: Ground Water - Grab

Sampled: 10/18/23 13:25
Received: 10/18/23 17:13
PO #: 1728919

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	15	mg/L		10/25/23 01:09	5	5.0	10/25/23 01:09	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		10/25/23 00:50	1	0.250	10/25/23 00:50	TMS	EPA 300.0 REV 2.1
Sulfate	150	mg/L		10/25/23 01:28	25	25	10/25/23 01:28	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	16.25	Feet		10/18/23 13:25	1		10/18/23 13:25	FIELD	Field*
Dissolved oxygen, Field	0.92	mg/L		10/18/23 13:25	1		10/18/23 13:25	FIELD	Field*
Oxidation Reduction Potential	-3.00	mV		10/18/23 13:25	1	-500	10/18/23 13:25	FIELD	Field*
pH, Field Measured	6.51	pH Units		10/18/23 13:25	1		10/18/23 13:25	FIELD	Field*
Specific Conductance, Field Measured	1020	umhos/cm		10/18/23 13:25	1		10/18/23 13:25	FIELD	Field*
Temperature, Field Measured	58.0	°F		10/18/23 13:25	1		10/18/23 13:25	FIELD	Field*
Temperature, Field Measured	14.4	°C		10/18/23 13:25	1		10/18/23 13:25	FIELD	Field*
Turbidity, Field Measured	3.20	NTU		10/18/23 13:25	1	0.00	10/18/23 13:25	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	390	mg/L		10/27/23 14:21	1	10	10/27/23 14:21	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		10/27/23 14:21	1	10	10/27/23 14:21	TMS	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	660	mg/L		10/24/23 11:18	1	26	10/24/23 13:47	CPS	SM 2540C
Total Metals - PIA									
Boron	29	ug/L		10/19/23 08:58	5	10	10/20/23 12:55	TJJ	EPA 6020A
Calcium	120	mg/L		10/19/23 08:58	5	0.20	10/19/23 16:46	TJJ	EPA 6020A
Magnesium	63	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:46	TJJ	EPA 6020A
Potassium	0.80	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:46	TJJ	EPA 6020A
Sodium	13	mg/L		10/19/23 08:58	5	0.10	10/19/23 16:46	TJJ	EPA 6020A



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 2231 W. Altorfer Drive
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ANALYTICAL RESULTS

Sample: GJ03740-01
Name: BA05
Matrix: Ground Water - Grab

Sampled: 10/19/23 11:40
Received: 10/19/23 16:42
PO #: 1728919

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	8.3	mg/L	Q4	10/25/23 02:24	5	5.0	10/25/23 02:24	TMS	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		10/20/23 16:20	1	0.250	10/20/23 16:20	CRD	EPA 300.0 REV 2.1
Sulfate	480	mg/L	Q4	10/31/23 00:42	100	100	10/31/23 00:42	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	22.61	Feet		10/19/23 11:40	1		10/19/23 11:40	FIELD	Field*
Dissolved oxygen, Field	0.69	mg/L		10/19/23 11:40	1		10/19/23 11:40	FIELD	Field*
Oxidation Reduction Potential	-63.0	mV		10/19/23 11:40	1	-500	10/19/23 11:40	FIELD	Field*
pH, Field Measured	6.82	pH Units		10/19/23 11:40	1		10/19/23 11:40	FIELD	Field*
Specific Conductance, Field Measured	1730	umhos/cm		10/19/23 11:40	1		10/19/23 11:40	FIELD	Field*
Temperature, Field Measured	13.1	°C		10/19/23 11:40	1		10/19/23 11:40	FIELD	Field*
Temperature, Field Measured	55.6	°F		10/19/23 11:40	1		10/19/23 11:40	FIELD	Field*
Turbidity, Field Measured	5.80	NTU		10/19/23 11:40	1	0.00	10/19/23 11:40	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	480	mg/L		11/01/23 09:54	1	10	11/01/23 09:54	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/01/23 09:54	1	10	11/01/23 09:54	CPS	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1200	mg/L		10/24/23 11:20	1	26	10/24/23 15:20	OGS	SM 2540C
Total Metals - PIA									
Boron	81	ug/L		10/23/23 09:11	5	10	10/26/23 12:07	TJJ	EPA 6020A
Calcium	200	mg/L		10/23/23 09:11	5	0.20	10/25/23 15:48	TJJ	EPA 6020A
Magnesium	100	mg/L	Q4	10/23/23 09:11	5	0.10	10/25/23 15:48	TJJ	EPA 6020A
Potassium	2.4	mg/L		10/23/23 09:11	5	0.10	10/25/23 15:48	TJJ	EPA 6020A
Sodium	45	mg/L		10/23/23 09:11	5	0.10	10/25/23 15:48	TJJ	EPA 6020A



ANALYTICAL RESULTS

Sample: GJ03740-02
Name: BA06
Matrix: Ground Water - Grab

Sampled: 10/19/23 13:09
Received: 10/19/23 16:42
PO #: 1728919

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	510	mg/L		10/31/23 01:37	100	100	10/31/23 01:37	CRD	EPA 300.0 REV 2.1
Sulfate	370	mg/L		10/25/23 03:40	50	50	10/25/23 03:40	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	24.76	Feet		10/19/23 13:09	1		10/19/23 13:09	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		10/19/23 13:09	1		10/19/23 13:09	FIELD	Field*
Oxidation Reduction Potential	-38.0	mV		10/19/23 13:09	1	-500	10/19/23 13:09	FIELD	Field*
pH, Field Measured	6.57	pH Units		10/19/23 13:09	1		10/19/23 13:09	FIELD	Field*
Specific Conductance, Field Measured	3170	umhos/cm		10/19/23 13:09	1		10/19/23 13:09	FIELD	Field*
Temperature, Field Measured	55.9	°F		10/19/23 13:09	1		10/19/23 13:09	FIELD	Field*
Temperature, Field Measured	13.3	°C		10/19/23 13:09	1		10/19/23 13:09	FIELD	Field*
Turbidity, Field Measured	3.30	NTU		10/19/23 13:09	1	0.00	10/19/23 13:09	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	500	mg/L		11/01/23 09:54	1	10	11/01/23 09:54	CPS	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		11/01/23 09:54	1	10	11/01/23 09:54	CPS	SM 2320B 1997*
Fluoride	< 0.250	mg/L		11/08/23 14:02	1	0.250	11/08/23 14:02	ANK	SM 4500F C 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	2000	mg/L		10/24/23 11:20	1	26	10/24/23 15:20	OGS	SM 2540C
Total Metals - PIA									
Boron	9900	ug/L		10/23/23 09:11	5	10	10/27/23 08:14	TJJ	EPA 6020A
Calcium	300	mg/L		10/23/23 09:11	5	0.20	10/25/23 16:03	TJJ	EPA 6020A
Magnesium	210	mg/L		10/23/23 09:11	5	0.10	10/25/23 16:03	TJJ	EPA 6020A
Potassium	0.31	mg/L		10/23/23 09:11	5	0.10	10/25/23 16:03	TJJ	EPA 6020A
Sodium	17	mg/L		10/23/23 09:11	5	0.10	10/25/23 16:03	TJJ	EPA 6020A



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B346859 - SW 3015 - EPA 6020A</u>									
Blank (B346859-BLK1)				Prepared & Analyzed: 10/19/23					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B346859-BS1)				Prepared & Analyzed: 10/19/23					
Boron	515	ug/L		555.6		93	80-120		
Calcium	5.69	mg/L		5.556		102	80-120		
Magnesium	5.73	mg/L		5.556		103	80-120		
Potassium	5.76	mg/L		5.556		104	80-120		
Sodium	5.58	mg/L		5.556		100	80-120		
Matrix Spike (B346859-MS1)				Sample: GJ03182-01		Prepared: 10/19/23 Analyzed: 10/20/23			
Boron	599	ug/L		555.6	16.0	105	75-125		
Calcium	108	mg/L		5.556	102	108	75-125		
Magnesium	57.6	mg/L		5.556	52.7	88	75-125		
Potassium	6.63	mg/L		5.556	0.725	106	75-125		
Sodium	12.9	mg/L		5.556	7.28	101	75-125		
Matrix Spike Dup (B346859-MSD1)				Sample: GJ03182-01		Prepared: 10/19/23 Analyzed: 10/20/23			
Boron	592	ug/L		555.6	16.0	104	75-125	1	20
Calcium	106	mg/L		5.556	102	78	75-125	2	20
Magnesium	57.1	mg/L		5.556	52.7	79	75-125	0.9	20
Potassium	6.50	mg/L		5.556	0.725	104	75-125	2	20
Sodium	12.7	mg/L		5.556	7.28	98	75-125	1	20
<u>Batch B346878 - IC No Prep - EPA 300.0 REV 2.1</u>									
Matrix Spike (B346878-MS1)				Sample: GJ03182-01		Prepared & Analyzed: 10/18/23			
Chloride	6.7	mg/L		1.500	5.3	93	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	14.1	NR	80-120		
Fluoride	1.49	mg/L		1.500	ND	99	80-120		
Matrix Spike Dup (B346878-MSD1)				Sample: GJ03182-01		Prepared & Analyzed: 10/18/23			
Sulfate	1.00E9	mg/L	Q4	1.500	14.1	NR	80-120	0	20
Fluoride	1.52	mg/L		1.500	ND	102	80-120	2	20
Chloride	6.5	mg/L		1.500	5.3	83	80-120	2	20
<u>Batch B346913 - No Prep - SM 2540C</u>									
Blank (B346913-BLK1)				Prepared & Analyzed: 10/19/23					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B346913-BS1)				Prepared & Analyzed: 10/19/23					
Solids - total dissolved solids (TDS)	913	mg/L		1000		91	84.9-109		
Duplicate (B346913-DUP1)				Sample: GJ03182-03		Prepared & Analyzed: 10/19/23			
Solids - total dissolved solids (TDS)	920	mg/L			930			1	5
Duplicate (B346913-DUP2)				Sample: GJ03182-09		Prepared & Analyzed: 10/19/23			
Solids - total dissolved solids (TDS)	< 17	mg/L			ND				5



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B347107 - SW 3015 - EPA 6020A</u>									
Blank (B347107-BLK1)				Prepared: 10/23/23 Analyzed: 10/26/23					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B347107-BS1)				Prepared: 10/23/23 Analyzed: 10/26/23					
Boron	518	ug/L		555.6		93	80-120		
Calcium	5.61	mg/L		5.556		101	80-120		
Magnesium	5.79	mg/L		5.556		104	80-120		
Potassium	5.80	mg/L		5.556		104	80-120		
Sodium	5.71	mg/L		5.556		103	80-120		
Matrix Spike (B347107-MS1)				Sample: GJ03740-01		Prepared: 10/23/23 Analyzed: 10/26/23			
Boron	618	ug/L		555.6	80.6	97	75-125		
Calcium	206	mg/L		5.556	201	88	75-125		
Magnesium	106	mg/L	Q4	5.556	102	73	75-125		
Potassium	8.20	mg/L		5.556	2.38	105	75-125		
Sodium	49.9	mg/L		5.556	44.9	91	75-125		
Matrix Spike Dup (B347107-MSD1)				Sample: GJ03740-01		Prepared: 10/23/23 Analyzed: 10/26/23			
Boron	636	ug/L		555.6	80.6	100	75-125	3	20
Calcium	207	mg/L		5.556	201	110	75-125	0.6	20
Magnesium	106	mg/L	Q4	5.556	102	72	75-125	0.04	20
Potassium	8.15	mg/L		5.556	2.38	104	75-125	0.7	20
Sodium	50.1	mg/L		5.556	44.9	94	75-125	0.3	20
<u>Batch B347137 - IC No Prep - EPA 300.0 REV 2.1</u>									
Matrix Spike (B347137-MS1)				Sample: GJ03740-01		Prepared & Analyzed: 10/20/23			
Fluoride	1.58	mg/L		1.500	0.194	93	80-120		
Matrix Spike Dup (B347137-MSD1)				Sample: GJ03740-01		Prepared & Analyzed: 10/20/23			
Fluoride	1.72	mg/L		1.500	0.194	101	80-120	8	20
<u>Batch B347263 - No Prep - SM 2540C</u>									
Blank (B347263-BLK1)				Prepared & Analyzed: 10/24/23					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B347263-BS1)				Prepared & Analyzed: 10/24/23					
Solids - total dissolved solids (TDS)	983	mg/L		1000		98	84.9-109		
<u>Batch B347264 - No Prep - SM 2540C</u>									
Blank (B347264-BLK1)				Prepared & Analyzed: 10/24/23					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B347264-BS1)				Prepared & Analyzed: 10/24/23					
Solids - total dissolved solids (TDS)	947	mg/L		1000		95	84.9-109		
Duplicate (B347264-DUP1)				Sample: GJ03740-03		Prepared & Analyzed: 10/24/23			
Solids - total dissolved solids (TDS)	450	mg/L			430			5	5
<u>Batch B347400 - IC No Prep - EPA 300.0 REV 2.1</u>									



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike (B347400-MS1)									
	Sample: GJ03497-01			Prepared & Analyzed: 10/24/23					
Chloride	1.0E9	mg/L	Q4	1.500	15	NR	80-120		
Fluoride	1.56	mg/L		1.500	0.134	95	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	157	NR	80-120		
Matrix Spike (B347400-MS2)									
	Sample: GJ03740-01			Prepared & Analyzed: 10/25/23					
Chloride	1.0E9	mg/L	Q4	1.500	8.3	NR	80-120		
Matrix Spike Dup (B347400-MSD1)									
	Sample: GJ03497-01			Prepared & Analyzed: 10/24/23					
Fluoride	1.61	mg/L		1.500	0.134	98	80-120	3	20
Chloride	1.0E9	mg/L	Q4	1.500	15	NR	80-120	0	20
Sulfate	1.00E9	mg/L	Q4	1.500	157	NR	80-120	0	20
Matrix Spike Dup (B347400-MSD2)									
	Sample: GJ03740-01			Prepared & Analyzed: 10/25/23					
Chloride	1.0E9	mg/L	Q4	1.500	8.3	NR	80-120	0	20
<u>Batch B347669 - No Prep - SM 2320B 1997</u>									
Duplicate (B347669-DUP1)									
	Sample: GJ03182-01			Prepared & Analyzed: 10/27/23					
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO3	450	mg/L			438			3	10
Duplicate (B347669-DUP2)									
	Sample: GJ03497-01			Prepared & Analyzed: 10/27/23					
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO3	412	mg/L			400			3	10
<u>Batch B347854 - IC No Prep - EPA 300.0 REV 2.1</u>									
Matrix Spike (B347854-MS1)									
	Sample: GJ03740-01			Prepared & Analyzed: 10/31/23					
Sulfate	1.00E9	mg/L	Q4	1.500	478	NR	80-120		
Matrix Spike Dup (B347854-MSD1)									
	Sample: GJ03740-01			Prepared & Analyzed: 10/31/23					
Sulfate	1.00E9	mg/L	Q4	1.500	478	NR	80-120	0	20
<u>Batch B347965 - No Prep - SM 2320B 1997</u>									
Duplicate (B347965-DUP1)									
	Sample: GJ03740-01			Prepared & Analyzed: 11/01/23					
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO3	500	mg/L			475			5	10
<u>Batch B348569 - No Prep - SM 4500F C 1997</u>									
Matrix Spike (B348569-MS1)									
	Sample: GJ03740-02			Prepared & Analyzed: 11/08/23					
Fluoride	1.25	mg/L		1.000	0.231	102	80-120		
Matrix Spike Dup (B348569-MSD1)									
	Sample: GJ03740-02			Prepared & Analyzed: 11/08/23					
Fluoride	1.26	mg/L		1.000	0.231	102	80-120	0.2	20



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

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

20

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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

Section A Required Client Information		Section B Required Project Information		Section C Invoice Information	
Company: Visira Corp-Duck Creek Address: 17751 North Cicero Rd Canton, IL 61520 Email To: Brian.Voelker@VisiraCorp.com Phone: (217) 753-8911 Fax: Requested Due Date/TAT: 10 day		Report To: Brian Voelker Copy To: Sam Davies: samantha.daves@visiracorp.com Daryl Johnson: Robert.Johnson@visiracorp.com Purchase Order No.: Project Name: Project Number: 2285		Attention: Brian Voelker Company Name: Visira Corp Address: see Section A Quote Reference: Project Manager: Profile #	
NPDES UST Site Location STATE: IL		GROUND WATER RCRA OTHER Project No./ Lab I.D.		REGULATORY AGENCY DRINKING WATER OTHER	

Section D Required Client Information		Valid Matrix Codes		SAMPLE TYPE (G=GRAB C=COMP)		COLLECTED		SAMPLE TEMP AT COLLECTION		PRESERVATIVES		Requested Analysis Filtered (Y/N)		SAMPLE CONDITIONS	
ITEM #		MATRIX CODE	CODE	MATRIX CODE	CODE	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME
1	G53S	WASTEWATER	WW	WASTEWATER	WW	10/17/23	1504								
2	G54L	WASTEWATER	WW	WASTEWATER	WW										
3	G54S	WASTEWATER	WW	WASTEWATER	WW										
4	G55L	WASTEWATER	WW	WASTEWATER	WW	10/17/23	1337								
5	G55S	WASTEWATER	WW	WASTEWATER	WW	10/17/23	1335								
6	G56L	WASTEWATER	WW	WASTEWATER	WW	10/17/23									
7	G56S	WASTEWATER	WW	WASTEWATER	WW										
8	G57L	WASTEWATER	WW	WASTEWATER	WW										
9	G57S	WASTEWATER	WW	WASTEWATER	WW										
10	G58L	WASTEWATER	WW	WASTEWATER	WW										
11	G58S	WASTEWATER	WW	WASTEWATER	WW										
12	G59L	WASTEWATER	WW	WASTEWATER	WW										
13	G59S	WASTEWATER	WW	WASTEWATER	WW										
14	G60L	WASTEWATER	WW	WASTEWATER	WW										
15	G60S	WASTEWATER	WW	WASTEWATER	WW										
16	G61S	WASTEWATER	WW	WASTEWATER	WW										

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
DC-23Q4 Rev 0			10/17/23	1651		10/17/23	1651

SAMPLER NAME AND SIGNATURE		DATE SIGNED (MM/DD/YYYY)
PRINT Name of SAMPLER: Logan Ross SIGNATURE of SAMPLER: <i>[Signature]</i>		10/17/23

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information		Section B Required Project Information		Section C Invoice Information													
Company: Visira Corp-Duck Creek Address: 17751 North Cicco Rd Canton, IL 61520 Email To: Brian.Voelker@VisiraCorp.com Phone: (217) 753-8911 Fax: Requested Due Date/TAT: 10 day		Report To: Brian Voelker Copy To: Sam Davies: samantha.davies@visiracorp.com Daryl Johnson: Robert.Johnson@visiracorp.com Purchase Order No.: Project Name: Project Number: 2285		Attention: Brian Voelker Company Name: Visira Corp Address: see Section A Quote Reference: Project Manager: Profile #													
Regulatory Agency: GROUND WATER NPDES: RCRA UST: IL Site Location: STATE:		Requested Analysis Filtered (Y/N)		Pages: 2 of 10													
Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL SOLID SL OIL OL WIRE WIRE AIR AIR OTHER OT TISSUE TS		SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE		Project No./ Lab I.D.													
ITEM #	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	Analysis Test Y/N	DATE	TIME	DATE	TIME	Temp in °C	Received on	Custody	Sealed	Intact (Y/N)	
1	G07L																
2	G08L																
3	G09L																
4	G12L																
5	G12S																
6	G14L																
7	G15L																
8	G15S																
9	G16L																
10	G50L																
11	G50S																
12	G51L																
13	G51S																
14	G52L																
15	G52S																
16	G53L																
ADDITIONAL COMMENTS DC-23Q4 Rev 0		RELINQUISHED BY / AFFILIATION DATE TIME		ACCEPTED BY / AFFILIATION DATE TIME		SAMPLE CONDITIONS Received on Temp in °C Custody Sealed Intact (Y/N)											
SIGNATURE OF SAMPLER: PRINT Name of SAMPLER: Laura Ross DATE Signed (MM/DD/YY): 10/17/23		SIGNATURE OF SAMPLER: PRINT Name of SAMPLER: Laura Ross DATE Signed (MM/DD/YY): 10/17/23		SIGNATURE OF SAMPLER: PRINT Name of SAMPLER: Laura Ross DATE Signed (MM/DD/YY): 10/17/23		SIGNATURE OF SAMPLER: PRINT Name of SAMPLER: Laura Ross DATE Signed (MM/DD/YY): 10/17/23											

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Vistra Corp-Duck Creek	Report To:	Brian Voelker	Attention:	Brian Voelker
Address:	17751 North Cilco Rd	Copy To:	Sam Davies: samantha.davies@vistracorp.com	Company Name:	Vistra Corp
City:	Canton, IL 61520		Daryl Johnson: Robert.Johnson@vistracorp.com	Address:	see Section A
Email To:	Brian.Voelker@VistraCorp.com	Purchase Order No.:		Quote Reference:	
Phone:	(217) 753-8911	Project Name:		Project Manager:	
Fax:		Project Number:	2285	Profile #:	
Requested Due Date/TAT:		10 day			
Section D Required Client Information		Section E Valid Matrix Codes		Section F Requested Analysis Filtered (Y/N)	
SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE		Valid Matrix Codes		Requested Analysis Filtered (Y/N)	
		MATRIX CODE	DW DRINKING WATER WT WASTE WATER WW WASTEWATER SL SOLID/SLURRY OL OIL WPE WASTE PESTICIDE AIR OTHER TISSE TS		
ITEM #	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED	DATE	TIME
1	BA01				
2	BA02				
3	BA02L				
4	BA03				
5	BA03L				
6	BA04				
7	BA05				
8	BA06				
9	G02D				
10	G02L				
11	G02S				
12	G03L				
13	G03S				
14	G04L				
15	G06L				
16	G06S				
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION
DC-23Q4 Rev 0		12	10/17/23	1651	10/17/23
SAMPLER NAME AND SIGNATURE		DATE SIGNED (MM/DD/YYYY)		DATE SIGNED (MM/DD/YYYY)	
PRINT Name of SAMPLER: LOC-AN ROSS		10/17/23		10/17/23	
SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:	
SAMPLER NAME AND SIGNATURE		DATE SIGNED (MM/DD/YYYY)		DATE SIGNED (MM/DD/YYYY)	
PRINT Name of SAMPLER: LOC-AN ROSS		10/17/23		10/17/23	
SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:	
SAMPLER NAME AND SIGNATURE		DATE SIGNED (MM/DD/YYYY)		DATE SIGNED (MM/DD/YYYY)	
PRINT Name of SAMPLER: LOC-AN ROSS		10/17/23		10/17/23	
SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:	
SAMPLER NAME AND SIGNATURE		DATE SIGNED (MM/DD/YYYY)		DATE SIGNED (MM/DD/YYYY)	
PRINT Name of SAMPLER: LOC-AN ROSS		10/17/23		10/17/23	
SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:	
SAMPLER NAME AND SIGNATURE		DATE SIGNED (MM/DD/YYYY)		DATE SIGNED (MM/DD/YYYY)	
PRINT Name of SAMPLER: LOC-AN ROSS		10/17/23		10/17/23	
SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:	
SAMPLER NAME AND SIGNATURE		DATE SIGNED (MM/DD/YYYY)		DATE SIGNED (MM/DD/YYYY)	
PRINT Name of SAMPLER: LOC-AN ROSS		10/17/23		10/17/23	
SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:	
SAMPLER NAME AND SIGNATURE		DATE SIGNED (MM/DD/YYYY)		DATE SIGNED (MM/DD/YYYY)	
PRINT Name of SAMPLER: LOC-AN ROSS		10/17/23		10/17/23	
SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:	
SAMPLER NAME AND SIGNATURE		DATE SIGNED (MM/DD/YYYY)		DATE SIGNED (MM/DD/YYYY)	
PRINT Name of SAMPLER: LOC-AN ROSS		10/17/23		10/17/23	
SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:	
SAMPLER NAME AND SIGNATURE		DATE SIGNED (MM/DD/YYYY)		DATE SIGNED (MM/DD/YYYY)	
PRINT Name of SAMPLER: LOC-AN ROSS		10/17/23		10/17/23	
SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:	
SAMPLER NAME AND SIGNATURE		DATE SIGNED (MM/DD/YYYY)		DATE SIGNED (MM/DD/YYYY)	
PRINT Name of SAMPLER: LOC-AN ROSS		10/17/23		10/17/23	
SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:	
SAMPLER NAME AND SIGNATURE		DATE SIGNED (MM/DD/YYYY)		DATE SIGNED (MM/DD/YYYY)	
PRINT Name of SAMPLER: LOC-AN ROSS		10/17/23		10/17/23	
SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:	
SAMPLER NAME AND SIGNATURE		DATE SIGNED (MM/DD/YYYY)		DATE SIGNED (MM/DD/YYYY)	
PRINT Name of SAMPLER: LOC-AN ROSS		10/17/23		10/17/23	
SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:		SIGNATURE OF SAMPLER:	

CHAIN-OF-CUSTODY / Analytical Request Document

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Section A

Required Client Information:

Section B

Required Project Information:

Section C

Invoice Information:

Page: 1 of 10

Company: Visstra Corp. Power C. Inc.		Project To: Brian Voelker		Company Name: Visstra Corp		REGULATORY AGENCY	
Address: 17751 North Chico Rd		Copy To: Sam Davies, samantha.davies@visstracorp.com		Address: see Section A		NPOES GROUND WATER DRINKING WATER	
City: Canon, IL 61520		Purchase Order No.: Daryl Johnson Robert.Johnson@visstracorp.com		Reference: see Section A		UST RCRA OTHER	
Email To: Brian.Voelker@visstracorp.com		Project Name: Project Number: 2285		Site Location: IL		STATE: IL	
Phone: (217) 753-8911		Fax: 10 day		Requested Analysis Filtered (Y/N)		G5034197	
Requested Due Date/TAT: 10 day		Project Number: 2285		Requested Analysis Filtered (Y/N)		G5034197	

ITEM #	Section D Required Client Information Valid Matrix Codes BATTERIES WATER WASTE WATER PRODUCT COLLECTED WIFE AIR OTHER TSS	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1		BA01			10/18/23	1325		4		DC-257-203			
2		BA02			10/18/23	1434		4		DC-257-204			
3		BA02L			10/18/23	1434		4		DC-257-205			
4		BA03			10/18/23	945		1		DC-811-204			
5		BA04			10/18/23	950		1		DC-845-201-202			
6		BA04			10/18/23	1540		4		DC-845-203			
7		BA05			10/18/23	1325		4		DC-845-205			
8		BA01 Dup			10/18/23	1325		4		DC-CLOSURE-201-202			
9		BA02			10/18/23	1325		4		DC-SUP-000			
10		BA02L			10/18/23	1325		4		DC-WPCP-203-206			
11		BA03			10/18/23	1325		4					
12		BA04			10/18/23	1325		4					
13		BA05			10/18/23	1325		4					
14		BA06			10/18/23	1325		4					
15		BA07			10/18/23	1325		4					
16		BA08			10/18/23	1325		4					

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME	
DC-2304 Rev 0		People & Power		10/18/23		1713		People & Power		10/18/23		1713	
SAMPLER NAME AND SIGNATURE		PRINT Name of SAMPLER:		DATE Signed (MM/DD/YY):		Temp in °C		Received on Ice (Y/N)		Custody Sealed Cooler (Y/N)		Samples Intact (Y/N)	
People & Power		People & Power		10/18/23		1713		Y		N		Y	

ITEM #	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	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives									Analysis Test ↓ (Y/N) ↑	Requested Analysis Filtered (Y/N)								Residual Chlorine (Y/N)	Project No./ Lab I.D.		
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other														
1	BA01																													
2	BA02																													
3	BA02L																													
4	BA03																													
5	BA03L																													
6	BA04																													
7	BA05																													
8	BA06																													
9	G02D																													
10	G02L																													
11	G02S																													
12	G03L																													
13	G03S																													
14	G04L																													
15	G06L																													
16	G06S																													
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS																
DC-23Q4 Rev 0		Joseph R Ruiz		10/19/23		1642		g r o c e s		10/19/23		1642		N.Y.N.Y.																
SAMPLER NAME AND SIGNATURE		PRINT Name of SAMPLER:		SIGNATURE of SAMPLER:		DATE Signed (MM/DD/YYYY):		Temp in °C		Received on Ice (Y/N)		Custody Sealed Cooler (Y/N)		Samples Intact (Y/N)																
						10/19/23		14.9		Y		N		Y																

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Page: 7 of 10

SAR-3: Episodic Depth to Groundwater Measurements

All DTWs on SAR-3 must be collected within 24 hours.

Plant: DC

Event: DC-23Q4 Rev 1

Well	Unique ID	Unit Num	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
BA01	DC-BA01	205	BAB	10/16/23	1435	16.25		BG
BA01C	DC-BA01!C	205	BAB		1439	16.07		
BA01L	DC-BA01!L	205	BAB		1437	17.15		
BA02	DC-BA02	205	BAB		1423	13.03	U:6/19/23 GKJ	
BA02L	DC-BA02!L	205	BAB		1425		Top of Pump	
BA03	DC-BA03	205	BAB		1324	11.06		
BA03L	DC-BA03!L	205	BAB		1320	10.85		
BA04	DC-BA04	205	BAB		1442	7.75		
BA05	DC-BA05#	205	BAB		1506	26.60		
BA06	DC-BA06	205	BAB		1500	24.70		
G02L	DC-G02!L	204	LF		1454	16.20		
G02S	DC-G02#S	204	LF		1449	14.23	Transducer N/A	
G02D	DC-G02&D	204	LF		1452	25.09	alternate name P02D	
G03L	DC-G03!L	204	LF		1503	13.72		
G03S	DC-G03#S	204	LF		1500	13.55		
G04L	DC-G04!L	204	LF		1350	15.40		
G04S	DC-G04#S	204	LF		1353	21.43		
G06L	DC-G06!L	204	LF		1105	23.03		
G06S	DC-G06#S	204	LF		1103	23.34		
G07L	DC-G07!L	204	LF		1110	21.41	Top of Pump	
G08L	DC-G08!L	204	LF		1113	21.20	Top of Pump	
G09L	DC-G09!L	204	LF		1121	21.37	Top of Pump	
G09S	DC-G09#S	204	LF		1118	22.33		

SAR-3: Episodic Depth to Groundwater Measurements

All DTWs on SAR-3 must be collected within 24 hours.

Plant: DC

Event: DC-23Q4 Rev 1

Well	Unique ID	Unit Numt	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
G12L	DC-G12!L	204	LF	10/16/23	1146	24.50		BG
G12S	DC-G12#S	204	LF		1149	25.70		
G14L	DC-G14!L	204	LF		1159	26.14		
G15L	DC-G15!L	204	LF		1225	32.95	Top of Pump	
G15S	DC-G15#S	204	LF		1227	34.44		
G16L	DC-G16!L	204	LF		1230	32.45		
G50L	DC-G50!L	203	GMF		1129	17.42	Top of Pump	
G50S	DC-G50#S	203	GMF		1131	18.80		
G51L	DC-G51!L	203	GMF		1146	18.68	Top of Pump	
G51S	DC-G51#S	203	GMF		1144	19.81		
G52L	DC-G52!L	203	GMF		1148	28.30		
G52S	DC-G52#S	203	GMF		1151	32.04		
G53L	DC-G53!L	203	GMF		1119	15.81		
G53S	DC-G53#S	203	GMF		1121	18.73		
G54L	DC-G54!L	203	GMF		1158	21.89		
G54S	DC-G54#S	203	GMF		1154	28.00		
G55L	DC-G55!L	203	GMF		1209	19.62		
G55S	DC-G55#S	203	GMF		1213	19.51		
G56L	DC-G56!L	203	GMF		1014	20.10		
G56S	DC-G56#S	203	GMF		1016	20.77		
G57L	DC-G57!L	203	GMF		1018	25.02		
G57S	DC-G57#S	203	GMF		1020	24.83		
G58L	DC-G58!L	203	GMF		1029	28.95		

SAR-3: Episodic Depth to Groundwater Measurements

All DTWs on SAR-3 must be collected within 24 hours.

Plant: DC
Event: DC-23Q4 Rev 1

Well	Unique ID	Unit Numt	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
G58S	DC-G58#S	203	GMF	10/16/23	1030	29.05		BG
G59L	DC-G59!L	203	GMF		1034	29.09		
G59S	DC-G59#S	203	GMF		1033	34.12		
G60L	DC-G60!L	203	GMF		1038	18.65		
G60S	DC-G60#S	203	GMF		1041	26.67		
G61S	DC-G61#S	203	GMF		1046	23.11		
G62L	DC-G62!L	203	GMF		1048	23.35		
G63L	DC-G63!L	203	GMF		1105	25.19		
G63S	DC-G63#S	203	GMF		1107	26.05		
G64L	DC-G64!L	203	GMF		1111	24.58		
G64S	DC-G64#S	203	GMF		1112	25.50		
G65L	DC-G65!L	203	GMF		0950	19.30		
G65S	DC-G65#S	203	GMF		0932	19.61		
G66L	DC-G66!L	203	GMF		0943	14.49		
G66S	DC-G66#S	203	GMF		0945	15.46		
G67L	DC-G67!L	203	GMF		1001	13.00		
G67S	DC-G67#S	203	GMF		1003	14.12		
G68L	DC-G68!L	203	GMF		0904	12.23		
G68S	DC-G68#S	203	GMF		0906	13.18		
G69L	DC-G69!L	203	GMF		0909	16.00		
G69S	DC-G69#S	203	GMF		0910	18.23		
G70L	DC-G70!L	203	GMF		0914	20.13		
G71L	DC-G71!L	203	GMF		0920	26.11		

SAR-3: Episodic Depth to Groundwater Measurements

All DTWs on SAR-3 must be collected within 24 hours.

Plant: DC

Event: DC-23Q4 Rev 1

Well	Unique ID	Unit Numt	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
G71S	DC-G71#S	203	GMF	10/16/23	0918	26.72		B6
G72L	DC-G72!L	203	GMF		0923	21.40		
G73L	DC-G73!L	203	GMF		0927	27.20		
L103	DC-L103	204	LF		1217	1.91		
OM01	DC-OM01	201-202	AP1/2		1306	13.01		
OM04S	DC-OM04#S	201-202	AP1/2		1057	21.19	OR04S	
OM05S	DC-OM05#S	201-202	AP1/2		1257	22.21		
OM07	DC-OM07	201-202	AP1/2		1245	13.11		
OM08	DC-OM08	201-202	AP1/2		1134	14.96		
OM09	DC-OM09	201-202	AP1/2		1529	4.24		
OM10	DC-OM10	201-202	AP1/2		0918	13.49		
OM12	DC-OM12	201-202	AP1/2		1148	15.89		
OM15	DC-OM15	201-202	AP1/2		0909	22.88		
OM16	DC-OM16	201-202	AP1/2		1044	26.94		
OM17	DC-OM17	201-202	AP1/2		1023	15.26		
OM21	DC-OM21	201-202	AP1/2		1059	12.66		
OM22S	DC-OM22#S	201-202	AP1/2		1333	20.53		
OM22D	DC-OM22&D	201-202	AP1/2		1335	20.08		
OM23S	DC-OM23#S	201-202	AP1/2		1403	42.47		
OM23D	DC-OM23&D	201-202	AP1/2		1407	38.95		
OM24D	DC-OM24&D	201-202	AP1/2		—	—	Not Accessible	
OM25S	DC-OM25#S	201-202	AP1/2		1436	16.20		
OM25D	DC-OM25&D	201-202	AP1/2	—	1440	58.26		—

SAR-3: Episodic Depth to Groundwater Measurements

All DTWs on SAR-3 must be collected within 24 hours.

Plant: DC

Event: DC-23Q4 Rev 1

Well	Unique ID	Unit Numt	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
OR02	DC-OR02	201-202	AP1/2	10/16/23	1254	7.81		BG
OR03S	DC-OR03#S	201-202	AP1/2		1242	45.92		
OR03D	DC-OR03&D	201-202	AP1/2		1118	45.45		
OR04D	DC-OR04&D	201-202	AP1/2		1055	23.01		
OR05D	DC-OR05&D	201-202	AP1/2		1255	22.98		
OR06A	DC-OR06!A	201-202	AP1/2		1235	15.14		
OR11	DC-OR11	201-202	AP1/2		1218	32.28		
OR13S	DC-OR13#S	201-202	AP1/2		1303	14.72		
OR13D	DC-OR13&D	201-202	AP1/2		1305	14.62		
OR14S	DC-OR14#S	201-202	AP1/2		1113	8.97		
OR14D	DC-OR14&D	201-202	AP1/2		1110	11.79		
OR18	DC-OR18	201-202	AP1/2		1012	19.65		
OR19	DC-OR19	201-202	AP1/2		1142	25.80		
OR20	DC-OR20	201-202	AP1/2		1205	22.30		
P01L	DC-P01!L	204	LF		1439	17.11		
P01S	DC-P01#S	204	LF		1437	16.73		
P01I	DC-P01\$I	204	LF		1441	16.53		
P02S	DC-P02#S	204	LF		1455	18.57		
P04S	DC-P04#S	204	LF		1353	21.43		
P05L	DC-P05!L	204	LF		1318	7.13		
P05S	DC-P05#S	204	LF		1326	7.16		
P05D	DC-P05&D	204	LF		1339	7.10		
P36L	DC-P36!L	204	LF	—	1041	12.64		—

SAR-3: Episodic Depth to Groundwater Measurements

All DTWs on SAR-3 must be collected within 24 hours.

Plant: DC

Event: DC-23Q4 Rev 1

Well	Unique ID	Unit Numt	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
P36S	DC-P36#S	204	LF	10/16/23	1043	12.82		BG
P36D	DC-P36&D	204	LF		1040	13.00		
P37L	DC-P37!L	204	LF		1129	14.60	Top of Pump	
P37D	DC-P37&D	204	LF		1131	17.33		
P38L	DC-P38!L	204	LF		1212	19.48		
P38S	DC-P38#S	204	LF		1206	21.00		
P39L	DC-P39!L	204	LF		1248	10.68		

SAR-3: Episodic Depth to Groundwater Measurements

All DTWs on SAR-3 must be collected within 24 hours.

Plant: DC
Event: DC-23Q4 Rev 1

Well	Unique ID	Unit Num	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
P36S	DC-P36#S	204	LF					
P36D	DC-P36&D	204	LF					
P37L	DC-P37!L	204	LF					
P37D	DC-P37&D	204	LF					
P38L	DC-P38!L	204	LF					
P38S	DC-P38#S	204	LF					
P39L	DC-P39!L	204	LF					
P39S	DC-P39#S	204	LF	10/18/23	1227	10.99		BG
P39D	DC-P39&D	204	LF		1225	16.57		
P40L	DC-P40!L	204	LF		1210	18.53		
P40S	DC-P40#S	204	LF		1211	17.28		
P41L	DC-P41!L	204	LF		1300	11.68		
P41S	DC-P41#S	204	LF		1302	14.00		
P41D	DC-P41&D	204	LF		1304	35.98		
P42L	DC-P42!L	204	LF		1255	10.30	Well Damaged	
P42S	DC-P42#S	204	LF		1132	10.82		
P42I1	DC-P42\$I1	204	LF		1129	11.19	alternate name P42I	
P42I2	DC-P42\$I2	204	LF		1127	33.79		
P42D	DC-P42&D	204	LF		1125	38.59	MW 52L 10/18/23 BG	
P52	DC-P52	203	GMF		1353	18.02	MW 52L	
P57L	DC-P57!L	203	GMF		1103	17.77		
P57S	DC-P57#S	203	GMF		1105	17.39		
P60	DC-P60	203	GMF		1113	26.54		

SAR-3: Episodic Depth to Groundwater Measurements

All DTWs on SAR-3 must be collected within 24 hours.

Plant: DC
Event: DC-23Q4 Rev 1

Well	Unique ID	Unit Num	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
P61	DC-P61	203	GMF	10/18/23	1121	17.06		BG
P62	DC-P62	203	GMF	1	1117	14.31		
P63	DC-P63	203	GMF	1	1119	16.42		
P64	DC-P64	203	GMF	—	1123	18.23		
R10L	DC-R10!L	204	LF	10/16/23	1427	23.90		
R11L	DC-R11!L	204	LF	10/16/23	1140	23.63		
R13L	DC-R13!L	204	LF	10/18/23	1232	24.36		
R61L	DC-R61!L	203	GMF		1323	22.21		
R72S	DC-R72#S	203	GMF	1	1318	24.70		
T43L	DC-T43!L	204	LF		1244	8.70		
T44L	DC-T44!L	204	LF		1246	12.64		
T45L	DC-T45!L	204	LF		1247	10.62		
T46L	DC-T46!L	204	LF		1250	7.47		
X301	DC-X301-leachate	203	GMF		1313	40.5		
XTPW02	DC-XTPW02-pore	203	GMF	—	1348	6.85	Dry	

BA02L

10/18/23-1330-11.31

SAR-4: Depth to Groundwater Measurements - On-site Transducer Downloads
All DTWs recorded on SAR-4 must be measured immediately prior to downloading the transducer data at that location.
Plant: DC
Event: DC-23Q4 Rev 1

Well	Unique ID	Unit Number	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	On-site Transducer Data					Comments	Initials
							Data Logger Serial No.	Does Data Match?	WL Reading on Transducer (ft)	Data downloaded?	Batt (H/M/L/R)		
BA01	DC-BA01	205	BAB	10/16/23	1435	16.25	21615533	Y	—	—	—	NOT connected	BG
BA02	DC-BA02	205	BAB		1423	13.03	21615636	Y	—	—	—	NOT connected	
BA02L	DC-BA02IL	205	BAB		1425	PUMP	21615682	Y	φφ.φ1	Y	H		
BA03	DC-BA03	205	BAB		1324	11.06	21615637	Y	—	—	—	NOT connected	
BA03L	DC-BA03IL	205	BAB		1326	10.85	21615687	Y	508.37	Y	M	Below Pump	
BA04	DC-BA04	205	BAB		1442	7.75	21615631	Y	—	—	—	NOT connected	
BA05	DC-BA05#	205	BAB		1506	26.60	21615540	Y	572.70	Y	M		
BA06	DC-BA06	205	BAB		1508	24.70	21615525	Y	571.06	Y	M		
G02S	DC-G02#S	204	LF		1449	14.23	21615554	Y	—	—	—	NOT connected	
G50S	DC-G50#S	203	GMF		1131	18.80	21615535	Y	604.91	Y	M		
G51S	DC-G51#S	203	GMF		1144	19.81	21615691	Y	599.96	Y	M		
G54L	DC-G54IL	203	GMF		1158	21.89	21615690	Y	600.98	Y	M		
G54S	DC-G54#S	203	GMF		1154	28.00	21615684	Y	599.83	Y	M		
G57S	DC-G57#S	203	GMF		1422	24.86	21615683	Y	597.83	Y	M		
G60L	DC-G60IL	203	GMF		1438	18.65	21615678	Y	596.69	Y	M		
G60S	DC-G60#S	203	GMF		1441	26.67	21615677	Y	586.02	Y	H		
G64L	DC-G64IL	203	GMF		1110	24.58	21615688	Y	622.77	Y	M		
G64S	DC-G64#S	203	GMF	—	1112	25.50	21615632	Y	599.02	Y	M		—

SAR-4: Depth to Groundwater Measurements - On-site Transducer Downloads
All DTWs recorded on SAR-4 must be measured immediately prior to downloading the transducer data at that location.
Plant: DC
Event: DC-23Q4 Rev 1

Well	Unique ID	Unit Number	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	Data Logger Serial No.	Does Data Match?	WL Reading on Transducer (ft)	Data downloaded?	Batt (H/M/L/R)	Comments	Initials
OM01	DC-OM01	201-AP1/202-2	AP1/2	10/16/23	1306	13.01	21615685	Y	582.15	Y	M		BG
OM04S	DC-OM04#S	201-AP1/202-2	AP1/2		1057	21.19	21615542	Y	586.09	Y	H		
OM07	DC-OM07	201-AP1/202-2	AP1/2		1245	13.11	21615541	Y		Y			
OM12	DC-OM12	201-AP1/202-2	AP1/2		1148	15.89	21615527	Y	577.30	Y	H		
OM16	DC-OM16	201-AP1/202-2	AP1/2		1044	26.94	21615539	Y		Y	/	Not Connected	
OM17	DC-OM17	201-AP1/202-2	AP1/2		1023	15.26	21615693	Y		Y	/	Not Connected	
OM21	DC-OM21	201-AP1/202-2	AP1/2		1059	12.66	21615593	Y	9.42	Y	H		
OM22D	DC-OM22&D	201-AP1/202-2	AP1/2		13.35	20.08	21615592	Y	578.88	Y	M		
OM23D	DC-OM23&D	201-AP1/202-2	AP1/2		1407	38.95	21615591	Y		Y	/	Not Connected	
OM24D	DC-OM24&D	201-AP1/202-2	AP1/2				21615522				/	Inaccessible	
OM25S	DC-OM25#S	201-AP1/202-2	AP1/2		1436	58.20	21615681	Y		Y	/	Not Connected	
OR02	DC-OR02	201-AP1/202-2	AP1/2		1254	7.81	21615679	Y	543.42	Y	M		
OR03D	DC-OR03&D	201-AP1/202-2	AP1/2		1244	45.45	21615577	Y	582.75	Y	M		
OR04D	DC-OR04&D	201-AP1/202-2	AP1/2		1055	21.87	21615570	Y	585.76	Y	H		
OR06A	DC-OR06/A	201-AP1/202-2	AP1/2		1235	15.14	21615692	Y		Y	/	Not Connected	
OR11	DC-OR11	201-AP1/202-2	AP1/2		1218	32.28	21615686	Y	564.14	Y	M		
OR13S	DC-OR13#S	201-AP1/202-2	AP1/2		1303	44.72	21615676	Y		Y	/	Not Connected	
OR13D	DC-OR13&D	201-AP1/202-2	AP1/2		1305	14.62	21564135				/	Wings	

SAR-4: Depth to Groundwater Measurements - On-site Transducer Downloads
All DTWs recorded on SAR-4 must be measured immediately prior to downloading the transducer data at that location.
Plant: DC
Event: DC-23Q4 Rev 1

Well	Unique ID	Unit Number	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	On-site Transducer Data					Comments	Initials
							Data Logger Serial No.	Does Data Match?	WL Reading on Transducer (ft)	Data downloaded?	Batt (H/M/L/R)		
OR14D	DC-OR14&D	201-AP1/ 202 2		10/16/23	1110	11.79	21615611	Y	587.01	Y	H		AG
OR19	DC-OR19	201-AP1/ 202 2			1142	25.80	21615634	Y	571.80	Y	M		
OR20	DC-OR20	201-AP1/ 202 2			1205	22.30	21615610	Y	565.16	Y	M		

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

Duck Creek

WELL/SAMPLE POINT BA01 Purge Method: Bladder
Date: 10/18/23 Start Time: 1140 Finish/Sample Time: 1325
Well Depth (Bottom) From MP: 1625 ft Min. Purge Volume: 1.5 Gal / L / mL
Depth to Water From MP: 1625 ft Total Purge Volume: 1.8 Gal / L / mL
Water Column Length: 1625 ft
Well Water Volume: 1625 Gal / L Total Drawdown: 0.06 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	1200	16.31	100	6.51	1010	1445	-1	1.25	3.0
2	1201	16.31	100	6.51	1010	1443	-2	1.06	3.2
3	1202	16.31	100	6.51	1020	1442	-3	92	3.2
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	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 500mL, H2SO4)
2	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
2	General (P, 250 mL) <u>1000 mL</u>
	Ammonia (P, 250mL, H2SO4)
2	Rad (P, 2.5L, HNO3)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
2	General (P,500mL)
	TOC (A,V, 40mL, H2SO4)

Ferrous Iron - 16.31 mg/L

Final DTW: 16.31 ft

Comments Duplicate filled here

Sampler's Signature: Joseph R. Reed

Duck Creek

WELL/SAMPLE POINT **BA02**

Purge Method: Bladder

Date: 10/18/23 Start Time: 1330 Finish/Sample Time: 1434

Well Depth (Bottom) From MP: ft Min. Purge Volume: 1.5 Gal 10 mL

Depth to Water From MP: 1282 ft Total Purge Volume: 1 Gal / L / mL

Water Column Length: ft

Well Water Volume: Gal / L Total Drawdown: 3.08 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1345	14.00	100	6.73	937	16.90	-40	7.20	13.6
2	1346	14.31	100	6.72	937	16.90	-40	7.11	14.3
3	1347	14.50	100	6.71	940	16.90	-41	6.89	11.1
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 500mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 500 mL) <u>1000 mL</u>
	Ammonia (P, 250mL, H2SO4)
1	Rad (P, 2.5L, HNO3)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)
	TOC (A,V, 40mL, H2SO4)

Ferrous Iron - mg/L

Final DTW: 15.90 ft

Comments

Sampler's Signature: Joseph A. Ruel

Duck Creek

WELL/SAMPLE POINT **BA02L**

Purge Method: Bladder

Date: 10/18/23 Start Time: 1329 Finish/Sample Time: 1329

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

Depth to Water From MP: Dry ft 11-31 - top of pump Total Purge Volume: — Gal / L / mL

Water Column Length: — ft

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

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1									
2									
3									
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: —

Sample Appearance:

Odor: ☐ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

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

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)
	TOC (A,V, 40mL, H2SO4)

Ferrous Iron - — mg/L

Final DTW: — ft

Comments

Transducer - 21615682 data taken

Sampler's Signature: Joseph R Red

Duck Creek

WELL/SAMPLE POINT

BA03

Purge Method:

Bladder

Date:

10/17/23 + 10/18/23

Start Time:

1124

Finish/Sample Time:

1219

Well Depth (Bottom) From MP:

NA ft

Min. Purge Volume:

1000 Gal/L (mL)

Depth to Water From MP:

11.05 ft

Total Purge Volume:

1015 1300 Gal/L (mL)

Water Column Length:

NA ft

Well Water Volume:

NA Gal/L

Total Drawdown:

.40 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	1150	11.35	100	6.55	815	18.08	92	0.12	1.9
2	1151	11.34	100	6.52	814	17.93	90	0.02	1.6
3	1152	11.39	100	6.49	813	17.87	88	0.0	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	☒	☐
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 500mL, H2SO4)
10/17	1 Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
10/17	1 General (P, 500mL) 1000 mL
10/18	1 Ammonia (P, 250mL, H2SO4)
	Rad (P, 2.5L, HNO3)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
10/17	1 General (P,500mL)
	TOC (A,V, 40mL, H2SO4)

Ferrous Iron -

mg/L

Final DTW:

11.45

ft

Comments

Rad bottle filled 10/18/23 @ 0945

Sampler's Signature:

Duck Creek

WELL/SAMPLE POINT

BA03L

Purge Method:

Bladder

Date:

10/17/23 + 10/18/23

Start Time:

1:24

Finish/Sample Time:

12:23

Well Depth (Bottom) From MP:

NA ft

Min. Purge Volume:

1.0

Gal / L / mL

Depth to Water From MP:

top of pump = 9.46 ft

Total Purge Volume:

1.3

Gal / L / mL

Water Column Length:

NA ft

Well Water Volume:

NA Gal / L

Total Drawdown:

NA 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	1158	pump	100	6.38	1300	18.28	114	0.80	210
2	1159	pump	100	6.37	1330	18.29	112	0.29	173
3	1200	pump	100	6.36	1350	18.28	111	0.59	173
4									
5									
Stabilization	NA	NA	NA	±0.2	±3%	±0.2	±20	±10% or 0.2	NA

Field Meter:

Horiaba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod. ☐ Strong

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

BOTTLE INFORMATION:

Qty	Bottles
	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 500mL, H2SO4)
10/17	1 Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
10/17	1 General (P, 500 mL)
	Ammonia (P, 250mL, H2SO4)
10/18	1 Rad (P, 2.5L, HNO3)

Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)
	TOC (A,V, 40mL, H2SO4)

Ferrous Iron -

mg/L

Final DTW: BELOW PUMP ft

Comments

Transducer 21615687 data taken - back bottle filled 10/18/23 @ 0950

Sampler's Signature:

Joseph A. Reed

Duck Creek

WELL/SAMPLE POINT **BA04** Purge Method: Bladder

Date: 10/18/23 Start Time: 1439 Finish/Sample Time: 1540

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

Depth to Water From MP: 7.69 ft Total Purge Volume: 1.8 Gal / L / mL

Water Column Length: 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	1454	7.72	100	7.06	1130	17.69	50	3.98	3.9
2	1455	7.73	100	7.03	1130	17.65	45	3.80	3.3
3	1456	7.73	100	7.00	1130	17.61	44	3.62	2.5
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 500mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) <u>1000</u>
	Ammonia (P, 250mL, H2SO4)
1	Rad (P, 2.5L, HNO3)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)
	TOC (A,V, 40mL, H2SO4)

Ferrous Iron - mg/L

Final DTW: 7.80 ft

Comments

Sampler's Signature:

Joseph R Reed

Duck Creek

WELL/SAMPLE POINT **BA05**

Purge Method: Bladder

Date: 10/19/23 Start Time: 1030 Finish/Sample Time: 1140

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

Depth to Water From MP: 22.61 ft Total Purge Volume: 1.8 Gal / L / mL

Water Column Length: — ft

Well Water Volume: — Gal / L Total Drawdown: 3.50 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	1037	100	25.04	6.85	1730	13.15	-63	0.71	5.1
2	1058	100	25.23	6.83	1730	13.12	-63	0.71	5.4
3	1059	100	25.41	6.82	1730	13.12	-63	0.69	5.8
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.	☒	☒ JR
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 500mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 500mL) <u>1000mL</u>
	Ammonia (P, 250mL, H2SO4)
1	Rad (P, 2.5L, HNO3)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)
	TOC (A,V, 40mL, H2SO4)

Ferrous Iron - mg/L

Final DTW: 26.11 ft

Comments Transducer data collected -21615540

Sampler's Signature: Joseph Red

86

Duck Creek

WELL/SAMPLE POINT **BA06**

Purge Method: Bladder

Date: 10/19/23 Start Time: 1143 Finish/Sample Time: 1309

Well Depth (Bottom) From MP: ft Min. Purge Volume: 1.5 Gal 0 mL

Depth to Water From MP: 24.76 ft Total Purge Volume: 1.8 Gal 0 mL

Water Column Length: JR 24.96 ft 24.76

Well Water Volume: 10/19/23 Gal / L Total Drawdown: 5.42 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	1208	2710	100	6.59	3200	13.29	-37	0.0	2.9
2	1209	2721	100	6.57	3180	13.30	-37	0.0	3.4
3	1210	2731	100	6.57	3170	13.30	-38	0.0	3.3
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

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

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P, 500 mL) 1000mL
3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron - Over Range mg/L

Final DTW: 30.18 ft

Comments

Sampler's Signature: Joseph R. Reed

Multiparameter Meter Field Calibration Checklist

Field Personnel: LR JR				Location: DUCK CREEK					
Weather: 44°-66° Sunny NW 1mph				Environment: GRASS, TREE, BUSHES, GRAVEL					
Multiparameter Water Meter		Make: HORIBA	Model: V-5000	Serial Number: PW 26YJD3					
Water Level Meter		Make: Heron	Model: Digger-T	Serial Number: 3717-T					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.91	s.u.	±0.1 s.u.	P	NA	NA	MSI	023067-01	3/14/2025
pH 7.00a	6.98	s.u.	±0.1 s.u.	P			MSI	023051-02	2/21/2025
pH 10.00a	9.91	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	1750	µS/cm	±5%	P			Geotech	3GF1197	Jun-24
ORP	242	mV	±15 mV	P			InSitu	3GD927	Jan-24
DO (Zero pt)	0	mg/L	±0.1	P			Macron	#000228049	8/26/2025
DO (Saturated)	98.7	%	97-100%	P			Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	P	NA	NA	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 0950				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.00	s.u.	±0.15 s.u.	P	NA	Geotech	3GB1049	Feb-25	
pH 7.00b	7.02	s.u.	±0.15 s.u.	P	NA	Geotech	2GF113	Jun-24	
pH 10.00b	9.87	s.u.	±0.15 s.u.	P	NA	Geotech	3GA1134	Jan-25	
SC 1000	1000	µS/cm	±5%	P	NA	Ricca	4209A12	Aug-24	

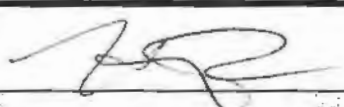
Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 1542				
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	NA	—	MSI	023067-01	3/14/2025
pH 7.00a	6.97	s.u.	±0.1 s.u.	P	NA	—	MSI	023051-02	2/21/2025
pH 10.00a	10.01	s.u.	±0.1 s.u.	P	NA	—	MSI	022361-01	12/27/2024
SC 1000	990	µS/cm	±5%	P	NA	—	Ricca	4209A12	Aug-24
DO (Zero pt)	0	mg/L	±0.1 mg/L	P	NA	—	Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	P	NA	—	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	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: 10/17/23
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Joe Reed</u>			Location: <u>Vistra Duck Creek</u>		
Weather: <u>50-70°F part cloudy wind 9-17 mph</u>			Environment: <u>grassy</u>		
Multiparameter Water Meter		Make: <u>Horiba</u>	Model: <u>V5000</u>	Serial Number: <u>PW2GYJD3</u>	
Water Level Meter		Make: <u>Heron</u>	Model: <u>Series 1A00</u>	Serial Number: <u>19FF211192HB</u>	

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.00</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	/	MSI	023067-01	3/14/2025
pH 7.00a	<u>7.01</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>		MSI	023051-02	2/21/2025
pH 10.00a	<u>10.00</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>		MSI	022361-01	12/27/2024
SC Zero (DI)	<u>0.30</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>N</u>		Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2.000</u>	µS/cm	±5%	<u>P</u>	<u>N</u>		Geotech	3GA1071	Jan-24
ORP	<u>240</u>	mV	±15 mV	<u>P</u>	<u>N</u>		InSitu	3GD927	Jan-24
DO (Zero pt)	<u>0.05</u>	mg/L	±0.1	<u>P</u>	<u>N</u>		Macron	#000228049	8/26/2025
DO (Saturated)	<u>99.0</u>	%	97-100%	<u>P</u>	<u>N</u>		Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>N</u>		Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: <u>940</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>4.07</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	Geotech	2GE870	May-24	
pH 7.00b	<u>7.00</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	Geotech	2GF113	Jun-24	
pH 10.00b	<u>9.99</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	Geotech	2GE820	May-24	
SC 1000	<u>998.1</u>	µS/cm	±5%	<u>P</u>	<u>N</u>	Ricca	4209A12	Aug-24	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: <u>1550</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.01</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	/	MSI	023067-01	3/14/2025
pH 7.00a	<u>7.05</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>		MSI	023051-02	2/21/2025
pH 10.00a	<u>10.02</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>		MSI	022361-01	12/27/2024
SC 1000	<u>1010</u>	µS/cm	±5%	<u>P</u>	<u>N</u>		Ricca	4209A12	Aug-24
DO (Zero pt)	<u>0.05</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>N</u>		Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>N</u>		Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	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: <u>Joseph A Reed</u>	Date: <u>10/18/23</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Joe Reed</u>		Location: <u>Duck Creek Power - Wistra</u>	
Weather: <u>Rain 55-60°F Wind 9-13 mph</u>		Environment: <u>Grassy</u>	
Multiparameter Water Meter	Make: <u>Horiba</u>	Model: <u>U5000</u>	Serial Number: <u>PW2645D3</u>
Water Level Meter	Make: <u>Heron</u>	Model: <u>Series 1100</u>	Serial Number: <u>11FF 2209305ML</u>

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.01</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>		MSI	023067-01	3/14/2025
pH 7.00a	<u>7.02</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>		MSI	023051-02	2/21/2025
pH 10.00a	<u>10.00</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>		MSI	022361-01	12/27/2024
SC Zero (DI)	<u>0.0</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>N</u>		Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2020</u>	µS/cm	±5%	<u>P</u>	<u>N</u>		Geotech	3GA1071	Jan-24
ORP	<u>240</u>	mV	±15 mV	<u>P</u>	<u>N</u>		InSitu	3GD927	Jan-24
DO (Zero pt)	<u>0.0</u>	mg/L	±0.1	<u>P</u>	<u>N</u>		Macron	#000228049	8/26/2025
DO (Saturated)	<u>98.5</u>	%	97-100%	<u>P</u>	<u>N</u>		Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>N</u>		Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: <u>930</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>3.96</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	Geotech	2GE870	May-24	
pH 7.00b	<u>6.99</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	Geotech	2GF113	Jun-24	
pH 10.00b	<u>9.99</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	Geotech	2GE820	May-24	
SC 1000	<u>995.8</u>	µS/cm	±5%	<u>P</u>	<u>N</u>	Ricca	4209A12	Aug-24 <u>Aug 24</u>	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: <u>1320</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.02</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>		MSI	023067-01	3/14/2025
pH 7.00a	<u>7.02</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>		MSI	023051-02	2/21/2025
pH 10.00a	<u>10.01</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>		MSI	022361-01	12/27/2024
SC 1000	<u>1000</u>	µS/cm	±5%	<u>P</u>	<u>N</u>		Ricca	4209A12	Aug-24 <u>Aug 24</u>
DO (Zero pt)	<u>0.0</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>N</u>		Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>N</u>		Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	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 <u>Aug 24</u>
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: <u>Joe Reed</u>	Date: <u>10/19/23</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Logan Ross</u>				Location: <u>DUCK CREEK</u>					
Weather: <u>Sunny 47°-68° 10mph NW</u>				Environment: <u>GRASS, WOODLAND GRAVEL</u>					
Multiparameter Water Meter		Make: <u>HORIBA</u>	Model: <u>U-5000</u>	Serial Number: <u>PW264JD3</u>					
Water Level Meter		Make: <u>Heron</u>	Model: <u>D-1000</u>	Serial Number: <u>1AFF211192HB</u>					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.10</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>7.06</u>	s.u.	±0.1 s.u.	<u>P</u>			MSI	023051-02	2/21/2025
pH 10.00a	<u>9.98</u>	s.u.	±0.1 s.u.	<u>P</u>			MSI	022361-01	12/27/2024
SC Zero (DI)	<u>0</u>	µS/cm	0<25 µS/cm	<u>P</u>			Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2014</u>	µS/cm	±5%	<u>P</u>			Geotech	3GF1197	Jun-24
ORP	<u>247</u>	mV	±15 mV	<u>P</u>			InSitu	3GD927	Jan-24
DO (Zero pt)	<u>0</u>	mg/L	±0.1	<u>P</u>			Macron	#000228049	8/26/2025
DO (Saturated)	<u>99</u>	%	97-100%	<u>P</u>			Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0</u>	NTU	<2 NTU	<u>P</u>	<u>NA</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: <u>0930</u>				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>4.08</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	3GB1049	Feb-25	
pH 7.00b	<u>7.14</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	2GF113	Jun-24	
pH 10.00b	<u>9.17</u>	s.u.	±0.15 s.u.	<u>F</u>	<u>CAL 10.00</u>	Geotech	3GA1134	Jan-25	
SC 1000	<u>960</u>	µS/cm	±5%	<u>P</u>	<u>NA</u>	Ricca	4209A12	Aug-24	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: <u>1447</u>				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.09</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>6.92</u>	s.u.	±0.1 s.u.	<u>P</u>			MSI	023051-02	2/21/2025
pH 10.00a	<u>9.96</u>	s.u.	±0.1 s.u.	<u>P</u>			MSI	022361-01	12/27/2024
SC 1000	<u>1040</u>	µS/cm	±5%	<u>P</u>			Ricca	4209A12	Aug-24
DO (Zero pt)	<u>0.0</u>	mg/L	±0.1 mg/L	<u>P</u>			Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>NA</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	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: <u>[Signature]</u>	Date: <u>10-20-23</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel:	Aaron Pemberton			Location:	Duck Creek				
Weather:	57° - 64° sunny wind NW @ 12 mph			Environment:	grass, dirt				
Multiparameter Water Meter	Make:	A7	Model:	600	Serial Number:	762215			
Water Level Meter	Make:	Horan	Model:	D.M.17	Serial Number:	3717-7			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.15	s.u.	±0.1 s.u.	P	YES	4.00	MSI	023067-01	3/14/2025
pH 7.00a	7.08	s.u.	±0.1 s.u.	P	YES	7.00	MSI	023051-02	2/21/2025
pH 10.00a	10.35	s.u.	±0.1 s.u.	P	YES	10.00	MSI	022361-01	12/27/2024
SC Zero (DI)	1.42	µS/cm	0<25 µS/cm	P	NO	-	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1079.7	µS/cm	±5%	P	NO	-	Geotech	3GF1197	Jun-24
ORP	245.8	mV	±15 mV	P	NO	-	InSitu	3GD927	Jan-24
DO (Zero pt)	0.10	mg/L	±0.1	P	NO	-	Macron	#000228049	8/26/2025
DO (Saturated)	97.72	%	97-100%	P	NO	-	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.00	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:	0941			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.01	s.u.	±0.15 s.u.	P	-	Geotech	3GB1049	Feb-25	
pH 7.00b	6.92	s.u.	±0.15 s.u.	P	-	Geotech	2GF113	Jun-24	
pH 10.00b	10.98	s.u.	±0.15 s.u.	P	-	Geotech	3GA1134	Jan-25	
SC 1000	108.1	µS/cm	±5%	P	-	Ricca	4209A12	Aug-24	

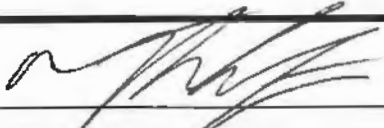
Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:	1445			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.01	s.u.	±0.1 s.u.	P	NO	-	MSI	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	10.98	s.u.	±0.1 s.u.	P	NO	-	MSI	022361-01	12/27/2024
SC 1000	1081.36	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)	0.08	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:		Date:	10/20/2023
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Multiparameter Meter Field Calibration Checklist

Field Personnel: Aaron Remberhan				Location: Duck Creek					
Weather: 52°-75°P Sunny Wind SE 12 mph				Environment: grass, woods, farm field					
Multiparameter Water Meter		Make: AT	Model: 600	Serial Number: 762215					
Water Level Meter		Make: Heron	Model: D1001	Serial Number: 3717-7					
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	023067-01	3/14/2025
pH 7.00a	7.05	s.u.	±0.1 s.u.	P			MSI	023051-02	2/21/2025
pH 10.00a	10.07	s.u.	±0.1 s.u.	P			MSI	022361-01	12/27/2024
SC Zero (DI)	0.81	µS/cm	0<25 µS/cm	P			Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2020.1	µS/cm	±5%	P			Geotech	3GF1197	Jun-24
ORP	242.8	mV	±15 mV	P			InSitu	3GD927	Jan-24
DO (Zero pt)	0.09	mg/L	±0.1	P			Macron	#000228049	8/26/2025
DO (Saturated)	98.73	%	97-100%	P			Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.00	NTU	<2 NTU	P			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 0915				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.03	s.u.	±0.15 s.u.	P	N/A	Geotech	3GB1049	Feb-25	
pH 7.00b	7.01	s.u.	±0.15 s.u.	P		Geotech	2GF113	Jun-24	
pH 10.00b	10.03	s.u.	±0.15 s.u.	P		Geotech	3GA1134	Jan-25	
SC 1000	1006.6	µS/cm	±5%	P		Ricca	4209A12	Aug-24	

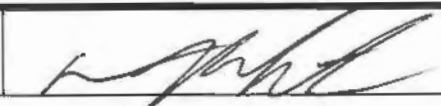
Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 1600				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.08	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023067-01	3/14/2025
pH 7.00a	7.05	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	998.34	µS/cm	±5%	P			Ricca	4209A12	Aug-24
DO (Zero pt)	0.09	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

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: 10/23/2023
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Logan Ross</u>				Location: <u>DUCK CREEK</u>			
Weather: <u>Sunny 59-74° 13 mph S</u>				Environment: <u>GRASS WOODS, GRAVEL</u>			
Multiparameter Water Meter		Make: <u>HORIBA</u>	Model: <u>V-5000</u>	Serial Number: <u>PW26YJD3</u>			
Water Level Meter		Make: <u>HEBO</u>	Model: <u>1900</u>	Serial Number: <u>19FF2202</u>			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>3.98</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	-	MSI	023067-01	3/14/2025
pH 7.00a	<u>6.79</u>	s.u.	±0.1 s.u.	<u>F</u>	<u>6.98</u>	<u>Y</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>9.90</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	-	MSI	022361-01	12/27/2024
SC Zero (DI)	<u>0.0</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>NO</u>	-	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>1970</u>	µS/cm	±5%	<u>P</u>	<u>NO</u>	-	Geotech	3GF1197	Jun-24
ORP	<u>241</u>	mV	±15 mV	<u>P</u>	<u>NO</u>	-	InSitu	3GD927	Jan-24
DO (Zero pt)	<u>0.0</u>	mg/L	±0.1	<u>P</u>	<u>NO</u>	-	Macron	#000228049	8/26/2025
DO (Saturated)	<u>100</u>	%	97-100%	<u>P</u>	<u>NO</u>	-	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>NO</u>	-	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: <u>0850</u>	
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Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	<u>3.93</u>	s.u.	±0.15 s.u.	<u>P</u>	-	Geotech	3GB1049	Feb-25
pH 7.00b	<u>7.07</u>	s.u.	±0.15 s.u.	<u>P</u>	-	Geotech	2GF113	Jun-24
pH 10.00b	<u>10.15</u>	s.u.	±0.15 s.u.	<u>P</u>	-	Geotech	3GA1134	Jan-25
SC 1000	<u>997</u>	µS/cm	±5%	<u>P</u>	-	Ricca	4209A12	Aug-24

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: <u>1616</u>	
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Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.01</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>6.92</u>	s.u.	±0.1 s.u.	<u>P</u>			MSI	023051-02	2/21/2025
pH 10.00a	<u>9.98</u>	s.u.	±0.1 s.u.	<u>P</u>			MSI	022361-01	12/27/2024
SC 1000	<u>1010</u>	µS/cm	±5%	<u>P</u>			Ricca	4209A12	Aug-24
DO (Zero pt)	<u>0.0</u>	mg/L	±0.1 mg/L	<u>P</u>			Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:	
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Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	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: <u>Logan Ross</u>	Date: <u>10/23/2023</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Aaron Rembert</u>			Location: <u>Duck Creek</u>		
Weather: <u>67°-77° mostly sunny w/ some SW 12 mph</u>			Environment: <u>woods, grass, dirt, gravel</u>		
Multiparameter Water Meter	Make: <u>Horsbon</u>	Model: <u>US000</u>	Serial Number: <u>PV26Y503</u>		
Water Level Meter	Make: <u>Heron</u>	Model: <u>Dipper</u>	Serial Number: <u>3717-7 PV26Y503A</u>		

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>3.99</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>No</u>	<u>N/A</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>7.04</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>I</u>	<u>I</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>10.06</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	022361-01	12/27/2024
SC Zero (DI)	<u>0.0</u>	µS/cm	0<25 µS/cm	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2000</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Geotech	3GF1197	Jun-24
ORP	<u>237</u>	mV	±15 mV	<u>I</u>	<u>I</u>	<u>I</u>	InSitu	3GD927	Jan-24
DO (Zero pt)	<u>0.09</u>	mg/L	±0.1	<u>I</u>	<u>I</u>	<u>I</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>97.1</u>	%	97-100%	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.5</u>	NTU	<2 NTU	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: <u>0915</u>		<u>238 @ 18°C</u>	
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>4.00</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N/A</u>	Geotech	3GB1049	Feb-25	
pH 7.00b	<u>6.89</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>	Geotech	2GF113	Jun-24	
pH 10.00b	<u>10.09</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>	Geotech	3GA1134	Jan-25	
SC 1000	<u>1010</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	Ricca	4209A12	Aug-24	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: <u>1513</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.03</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>No</u>	<u>N/A</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>7.05</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>I</u>	<u>I</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>10.09</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	022361-01	12/27/2024
SC 1000	<u>1030</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Ricca	4209A12	Aug-24
DO (Zero pt)	<u>0.09</u>	mg/L	±0.1 mg/L	<u>I</u>	<u>I</u>	<u>I</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

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: <u>[Signature]</u>	Date: <u>10/24/2023</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel:	Aaron Amberlon			Location:	Duck Creek				
Weather:	62°-72° Cloudy Rain Wind SW 5-10 mph			Environment:	Woods, grass, gravel, dirt				
Multiparameter Water Meter	Make:	Horiba	Model:	US000	Serial Number:	PV268503			
Water Level Meter	Make:	Heron	Model:	Digport	Serial Number:	3717-T			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.02	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023067-01	3/14/2025
pH 7.00a	7.00	s.u.	±0.1 s.u.	P			MSI	023051-02	2/21/2025
pH 10.00a	10.07	s.u.	±0.1 s.u.	I			MSI	022361-01	12/27/2024
SC Zero (DI)	0.0	µS/cm	0<25 µS/cm	I			Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2010	µS/cm	±5%	I			Geotech	3GF1197	Jun-24
ORP	231	mV	±15 mV	I			InSitu	3GD927	Jan-24
DO (Zero pt)	0.09	mg/L	±0.1	I			Macron	#000228049	8/26/2025
DO (Saturated)	99.1	%	97-100%	I			Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	I			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time:	0915		
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.00	s.u.	±0.15 s.u.	P	N/A	Geotech	3GB1049	Feb-25	
pH 7.00b	6.89	s.u.	±0.15 s.u.	I		Geotech	2GF113	Jun-24	
pH 10.00b	10.13	s.u.	±0.15 s.u.	I		Geotech	3GA1134	Jan-25	
SC 1000	1000	µS/cm	±5%	I		Ricca	4209A12	Aug-24	

Approx. every 4 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	4.07	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023067-01	3/14/2025
pH 7.00a	7.04	s.u.	±0.1 s.u.	I			MSI	023051-02	2/21/2025
pH 10.00a	10.08	s.u.	±0.1 s.u.	I			MSI	022361-01	12/27/2024
SC 1000	1030	µS/cm	±5%	I			Ricca	4209A12	Aug-24
DO (Zero pt)	0.09	mg/L	±0.1 mg/L	I			Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	I			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	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:	10/25/2023
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Multiparameter Meter Field Calibration Checklist

Field Personnel:	Aaron Pemberton			Location:	Duck Creek				
Weather:	64° - 70° cloudy, rain wind S 10mph			Environment:	woods, mud, grass				
Multiparameter Water Meter	Make:	Fluor: 64	Model:	VS000	Serial Number:	WUG83C85			
Water Level Meter	Make:	Hean	Model:	Dipart	Serial Number:	3717-7			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.07	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023067-01	3/14/2025
pH 7.00a	6.93	s.u.	±0.1 s.u.	P	I	I	MSI	023051-02	2/21/2025
pH 10.00a	9.96	s.u.	±0.1 s.u.	I	I	I	MSI	022361-01	12/27/2024
SC Zero (DI)	0.0	µS/cm	0<25 µS/cm	I	I	I	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2030	µS/cm	±5%	I	I	I	Geotech	3GF1197	Jun-24
ORP	234	mV	±15 mV	I	I	I	InSitu	3GD927	Jan-24
DO (Zero pt)	0.09	mg/L	±0.1	I	I	I	Macron	#000228049	8/26/2025
DO (Saturated)	99.2	%	97-100%	I	I	I	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	I	I	I	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time:	0915			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.03	s.u.	±0.15 s.u.	P	N/A	Geotech	3GB1049	Feb-25	
pH 7.00b	6.87	s.u.	±0.15 s.u.	I	I	Geotech	2GF113	Jun-24	
pH 10.00b	9.92	s.u.	±0.15 s.u.	I	I	Geotech	3GA1134	Jan-25	
SC 1000	1010	µS/cm	±5%	I	I	Ricca	4209A12	Aug-24	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:	1547			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.07	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023067-01	3/14/2025
pH 7.00a	6.93	s.u.	±0.1 s.u.	I	I	I	MSI	023051-02	2/21/2025
pH 10.00a	9.96	s.u.	±0.1 s.u.	I	I	I	MSI	022361-01	12/27/2024
SC 1000	1030	µS/cm	±5%	I	I	I	Ricca	4209A12	Aug-24
DO (Zero pt)	0.09	mg/L	±0.1 mg/L	I	I	I	Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	I	I	I	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	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:	10/26/2023
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Logan Ross</u>				Location: <u>DUCK CREEK</u>					
Weather: <u>70°-84° CLOUDY/RAIN 9 mph S</u>				Environment: <u>Grass WOODLAND GRAVEL</u>					
Multiparameter Water Meter		Make: <u>HORIBA</u>	Model: <u>V5000</u>	Serial Number: <u>PW26YJD3</u>					
Water Level Meter		Make: <u>HERRON</u>	Model: <u>diaper-T</u>	Serial Number: <u>11FF2209305ML</u>					

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.10</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>—</u>	<u>—</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>6.93</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>—</u>	<u>—</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>9.53</u>	s.u.	±0.1 s.u.	<u>F</u>	<u>Y</u>	<u>9.99</u>	MSI	022361-01	12/27/2024
SC Zero (DI)	<u>0.0</u>	µS/cm	0-25 µS/cm	<u>P</u>	<u>—</u>	<u>—</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>1999</u>	µS/cm	±5%	<u>P</u>	<u>—</u>	<u>—</u>	Geotech	3GF1197	Jun-24
ORP	<u>236</u>	mV	±15 mV	<u>P</u>	<u>—</u>	<u>—</u>	InSitu	3GD927	Jan-24
DO (Zero pt)	<u>.23</u>	mg/L	±0.1	<u>F</u>	<u>Y</u>	<u>0.0</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>98</u>	%	97-100%	<u>P</u>	<u>—</u>	<u>—</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>1.2</u>	NTU	<2 NTU	<u>P</u>	<u>—</u>	<u>—</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: <u>0908</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>4.02</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	3GB1049	Feb-25	
pH 7.00b	<u>6.91</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	2GF113	Jun-24	
pH 10.00b	<u>10.01</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	3GA1134	Jan-25	
SC 1000	<u>1050</u>	µS/cm	±5%	<u>P</u>	<u>NA</u>	Ricca	4209A12	Aug-24	

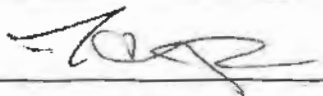
Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: <u> </u>			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.09</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>—</u>	<u>NA</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>6.82</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>—</u>	<u>NA</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>9.99</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>—</u>	<u>NA</u>	MSI	022361-01	12/27/2024
SC 1000	<u>1030</u>	µS/cm	±5%	<u>P</u>	<u>—</u>	<u>NA</u>	Ricca	4209A12	Aug-24
DO (Zero pt)	<u>0.0</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>—</u>	<u>NA</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>—</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: <u> </u>			
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: <u></u>	Date: <u>10/26/23</u>
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Logan Ross

Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Brendan Glennon</u>				Location: <u>Duck Creek PS</u>					
Weather: <u>65° Cloudy 9 Mph NNE</u>				Environment: <u>Grass Field</u>					
Multiparameter Water Meter		Make: <u>Horiba</u>	Model: <u>U-5000</u>	Serial Number: <u>WUG 83C85</u>					
Water Level Meter		Make: <u>Heron</u>	Model: <u>Digger-T</u>	Serial Number: <u>11FF2209 305ML</u>					

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.01</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	L344-09	12/14/2023
pH 7.00a	<u>6.98</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	L343-07	12/9/2023
pH 10.00a	<u>9.99</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	M082-04	3/25/2024
SC Zero (DI)	<u>8</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>N</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2040</u>	µS/cm	±5%	<u>P</u>	<u>N</u>	<u>N/A</u>	Geotech	3GA1071	Jan-24
ORP	<u>233</u>	mV	±15 mV	<u>P</u>	<u>N</u>	<u>N/A</u>	InSitu	264762	Jan-23
DO (Zero pt)	<u>0.08</u>	mg/L	±0.1	<u>P</u>	<u>N</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>1.00</u>	%	97-100%	<u>P</u>	<u>N</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>N</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: <u>1030</u>				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>4.04</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	Geotech	2GE870	Mar-24	
pH 7.00b	<u>7.06</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	Geotech	2GC931	Mar-24	
pH 10.00b	<u>10.09</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	Geotech	2GE820	May-24	
SC 1000	<u>1030</u>	µS/cm	±5%	<u>P</u>	<u>N</u>	Ricca	4207N97	Jul-24	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: <u>1423</u>				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.03</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	L344-09	12/14/2023
pH 7.00a	<u>6.99</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	L343-07	12/9/2023
pH 10.00a	<u>9.98</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	M082-04	3/25/2024
SC 1000	<u>1020</u>	µS/cm	±5%	<u>P</u>	<u>N</u>	<u>N/A</u>	Ricca	4207N97	Jul-24
DO (Zero pt)	<u>0.01</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>N</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>N</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L344-09	12/14/2023
7.00a		s.u.	±0.1 s.u.				MSI	L343-07	12/9/2023
10.00a		s.u.	±0.1 s.u.				MSI	M082-04	3/25/2024
SC 1000		µS/cm	±5%				Ricca	4207N97	Jul-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: <u>Brendan Glennon</u>	Date: <u>10/26/23</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Aaron Penabaz</u>		Location: <u>Duck Creek</u>	
Weather: <u>68°-71° & cloudy with SW wind</u>		Environment: <u>grass, mud</u>	
Multiparameter Water Meter	Make: <u>Horiba</u>	Model: <u>VS000</u>	Serial Number: <u>WUG63685</u>
Water Level Meter	Make: <u>Heron</u>	Model: <u>D-1000</u>	Serial Number: <u>3717-7</u>

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.05</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>6.92</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>10.01</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	022361-01	12/27/2024
SC Zero (DI)	<u>0.0</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>NO</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2010</u>	µS/cm	±5%	<u>P</u>	<u>NO</u>	<u>N/A</u>	Geotech	3GF1197	Jun-24
ORP	<u>231</u>	mV	±15 mV	<u>P</u>	<u>NO</u>	<u>N/A</u>	InSitu	3GD927	Jan-24
DO (Zero pt)	<u>0.04</u>	mg/L	±0.1	<u>P</u>	<u>NO</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>98.7</u>	%	97-100%	<u>P</u>	<u>NO</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>NO</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

236 @ 20°C

ICV (Initial Calibration Verification)					Time: <u>0930</u>				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>4.01</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NO</u>	Geotech	3GB1049	Feb-25	
pH 7.00b	<u>6.85</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NO</u>	Geotech	2GF113	Jun-24	
pH 10.00b	<u>9.89</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NO</u>	Geotech	3GA1134	Jan-25	
SC 1000	<u>1000</u>	µS/cm	±5%	<u>P</u>	<u>NO</u>	Ricca	4209A12	Aug-24	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: <u>1530</u>				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.04</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>7.08</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>10.04</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	022361-01	12/27/2024
SC 1000	<u>1030</u>	µS/cm	±5%	<u>P</u>	<u>NO</u>	<u>N/A</u>	Ricca	4209A12	Aug-24
DO (Zero pt)	<u>0.04</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>NO</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>NO</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	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: <u>[Signature]</u>	Date: <u>10/27/2023</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Logan Ross</u>				Location: <u>DUCK CREEK</u>			
Weather: <u>36-69 CLOUDY/RAIN 8m/s</u>				Environment: <u>GRASSLAND, WOODLAND</u>			
Multiparameter Water Meter		Make: <u>HORIBA</u>	Model: <u>L-5000</u>	Serial Number: <u>PW264JD3</u>			
Water Level Meter		Make: <u>Herron</u>	Model: <u>Dipper-T</u>	Serial Number: <u>11FF2209305ML</u>			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.10</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>NA</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>6.96</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>NA</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>10.07</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>NA</u>	MSI	022361-01	12/27/2024
SC Zero (DI)	<u>1.002</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>N</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2080</u>	µS/cm	±5%	<u>P</u>	<u>N</u>	<u>NA</u>	Geotech	3GF1197	Jun-24
ORP	<u>238</u>	mV	±15 mV	<u>P</u>	<u>N</u>	<u>NA</u>	InSitu	3GD927	Jan-24
DO (Zero pt)	<u>0.04</u>	mg/L	±0.1	<u>P</u>	<u>N</u>	<u>NA</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>99.9</u>	%	97-100%	<u>P</u>	<u>N</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>P</u>	<u>N</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs; unless only one well

ICV (Initial Calibration Verification)						Time: <u>0918</u>			
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Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	<u>4.09</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	3GB1049	Feb-25
pH 7.00b	<u>7.00</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	2GF113	Jun-24
pH 10.00b	<u>10.13</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	3GA1134	Jan-25
SC 1000	<u>979</u>	µS/cm	±5%	<u>P</u>	<u>NA</u>	Ricca	4209A12	Aug-24

Approx. every 4 hrs; unless only one well

CCV (Continued Calibration Verification):						Time: <u>1523</u>			
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Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.08</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>NA</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>7.02</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>NA</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>9.98</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>NA</u>	MSI	022361-01	12/27/2024
SC 1000	<u>1010</u>	µS/cm	±5%	<u>P</u>	<u>N</u>	<u>NA</u>	Ricca	4209A12	Aug-24
DO (Zero pt)	<u>0.0</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>N</u>	<u>NA</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>1.7</u>	NTU	<2 NTU	<u>P</u>	<u>N</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs; unless only one well

CCV (Continued Calibration Verification):						Time: <u> </u>			
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Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	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: <u>[Signature]</u>	Date: <u>10/27/23</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel:	Joe Reel			Location:	Duck Creek Power				
Weather:	cloudy/rain			Environment:	wet grassy				
Multiparameter Water Meter	Make:	Hanby	Model:	V5000	Serial Number:	V29 KJ 9HA			
Water Level Meter	Make:	Herm	Model:	Series 1000	Serial Number:	19FF-211192#B			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.00	s.u.	±0.1 s.u.	P	N		MSI	023067-01	3/14/2025
pH 7.00a	7.00	s.u.	±0.1 s.u.	P	N		MSI	023051-02	2/21/2025
pH 10.00a	10.02	s.u.	±0.1 s.u.	P	N		MSI	022361-01	12/27/2024
SC Zero (DI)	0.0	µS/cm	0<25 µS/cm	P	N		Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2000	µS/cm	±5%	P	N		Geotech	3GF1197	Jun-24
ORP	243	mV	±15 mV	P	N		InSitu	3GD927	Jan-24
DO (Zero pt)	0.01	mg/L	±0.1	P	N		Macron	#000228049	8/26/2025
DO (Saturated)	99.0	%	97-100%	P	N		Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	P	N		Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time:	1020		
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	3.97	s.u.	±0.15 s.u.	P	N	Geotech	3GB1049	Feb-25	
pH 7.00b	6.98	s.u.	±0.15 s.u.	P	N	Geotech	2GF113	Jun-24	
pH 10.00b	10.00	s.u.	±0.15 s.u.	P	N	Geotech	3GA1134	Jan-25	
SC 1000	1010	µS/cm	±5%	P	N	Ricca	4209A12	Aug-24	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:	1530		
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.00	s.u.	±0.1 s.u.	P	N		MSI	023067-01	3/14/2025
pH 7.00a	6.99	s.u.	±0.1 s.u.	P	N		MSI	023051-02	2/21/2025
pH 10.00a	9.99	s.u.	±0.1 s.u.	P	N		MSI	022361-01	12/27/2024
SC 1000	1010	µS/cm	±5%	P	N		Ricca	4209A12	Aug-24
DO (Zero pt)	0.01	mg/L	±0.1 mg/L	P	N		Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	P	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:	Joseph A. Reel	Date:	10/27/23
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Aaron Pemberton</u>		Location: <u>Duck Creek</u>	
Weather: <u>35°-41° sunny</u> <u>wind NW 11mph</u>		Environment: <u>grass, mud, gravel</u>	
Multiparameter Water Meter	Make: <u>AT</u>	Model: <u>600</u>	Serial Number: <u>606127</u>
Water Level Meter	Make: <u>Hecon</u>	Model: <u>Dipart</u>	Serial Number: <u>3117-7</u>

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.11</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>yes</u>	<u>4.00</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>7.09</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>yes</u>	<u>7.02</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>10.11</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>yes</u>	<u>10.01</u>	MSI	022361-01	12/27/2024
SC Zero (DI)	<u>12.0</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>no</u>	<u>-</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2000</u>	µS/cm	±5%	<u>P</u>	<u>no</u>	<u>-</u>	Geotech	3GF1197	Jun-24
ORP	<u>235.7</u>	mV	±15 mV	<u>P</u>	<u>no</u>	<u>-</u>	InSitu	3GD927	Jan-24
DO (Zero pt)	<u>0.09</u>	mg/L	±0.1	<u>P</u>	<u>no</u>	<u>-</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>98.45</u>	%	97-100%	<u>P</u>	<u>no</u>	<u>-</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.00</u>	NTU	<2 NTU	<u>P</u>	<u>no</u>	<u>-</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

235 @ 20°C

ICV (Initial Calibration Verification)					Time: <u>1000</u>				
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Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	<u>4.02</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	3GB1049	Feb-25
pH 7.00b	<u>6.96</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>I</u>	Geotech	2GF113	Jun-24
pH 10.00b	<u>9.03</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>	Geotech	3GA1134	Jan-25
SC 1000	<u>10.10</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	Ricca	4209A12	Aug-24

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: <u>1500</u>				
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Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.05</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>no</u>	<u>N/A</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>7.02</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>I</u>	<u>I</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>10.08</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	022361-01	12/27/2024
SC 1000	<u>10.12</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Ricca	4209A12	Aug-24
DO (Zero pt)	<u>0.09</u>	mg/L	±0.1 mg/L	<u>I</u>	<u>I</u>	<u>I</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.00</u>	NTU	<2 NTU	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
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Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	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: <u>[Signature]</u>	Date: <u>10/30/2023</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Logan R</u>				Location: <u>DUCK CREEK</u>					
Weather: <u>Sunny 26°-41° 11mph NW</u>				Environment: <u>GRASSLAND, WOODLAND</u>					
Multiparameter Water Meter		Make: <u>HORIBA</u>	Model: <u>V-5000</u>	Serial Number: <u>PW 264 JD3</u>					
Water Level Meter		Make: <u>HERRON</u>	Model: <u>dipper-T</u>	Serial Number: <u>11F12209305ML</u> <u>19FE211192HB</u>					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.89</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>6.93</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>I</u>	<u>I</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>7.99</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	022361-01	12/27/2024
SC Zero (DI)	<u>0.000</u>	µS/cm	0<25 µS/cm	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>1770</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Geotech	3GF1197	Jun-24
ORP	<u>239</u>	mV	±15 mV	<u>I</u>	<u>I</u>	<u>I</u>	InSitu	3GD927	Jan-24
DO (Zero pt)	<u>0.0</u>	mg/L	±0.1	<u>I</u>	<u>I</u>	<u>I</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>97.6</u>	%	97-100%	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: <u>0900</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>4.11</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N/A</u>	Geotech	3GB1049	Feb-25	
pH 7.00b	<u>7.02</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>	Geotech	2GF113	Jun-24	
pH 10.00b	<u>10.07</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>	Geotech	3GA1134	Jan-25	
SC 1000	<u>967</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	Ricca	4209A12	Aug-24	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: <u>1516</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>3.99</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	023067-01	3/14/2025
pH 7.00a	<u>7.01</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>I</u>	<u>I</u>	MSI	023051-02	2/21/2025
pH 10.00a	<u>9.96</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	022361-01	12/27/2024
SC 1000	<u>1020</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Ricca	4209A12	Aug-24
DO (Zero pt)	<u>0.00</u>	mg/L	±0.1 mg/L	<u>I</u>	<u>I</u>	<u>I</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

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: <u>[Signature]</u>	Date: <u>10/30/23</u>
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BGM

Multiparameter Meter Field Calibration Checklist

Field Personnel:	Aaron Amberlan			Location:	Duck Creek				
Weather:	32-40° Sunny Wind NW 15mph			Environment:	Grass, mud				
Multiparameter Water Meter	Make:	Hanna	Model:	U 5000	Serial Number:	60583085			
Water Level Meter	Make:	Herm	Model:	Dipper 7	Serial Number:	3717-7			
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	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	10.07	s.u.	±0.1 s.u.				MSI	022361-01	12/27/2024
SC Zero (DI)	0.0	µS/cm	0<25 µS/cm				Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2020	µS/cm	±5%				Geotech	3GF1197	Jun-24
ORP	230	mV	±15 mV				InSitu	3GD927	Jan-24
DO (Zero pt)	0.00	mg/L	±0.1				Macron	#000228049	8/26/2025
DO (Saturated)	98.9	%	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 4 hrs, unless only one well

237 @ 10/9/23

ICV (Initial Calibration Verification)						Time:	0910		
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.00	s.u.	±0.15 s.u.	P	N/A	Geotech	3GB1049	Feb-25	
pH 7.00b	6.88	s.u.	±0.15 s.u.			Geotech	2GF113	Jun-24	
pH 10.00b	10.10	s.u.	±0.15 s.u.			Geotech	3GA1134	Jan-25	
SC 1000	1030	µS/cm	±5%			Ricca	4209A12	Aug-24	

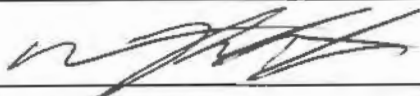
Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:	1420		
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	023067-01	3/14/2025
pH 7.00a	7.01	s.u.	±0.1 s.u.	P			MSI	023051-02	2/21/2025
pH 10.00a	10.03	s.u.	±0.1 s.u.				MSI	022361-01	12/27/2024
SC 1000	987	µS/cm	±5%				Ricca	4209A12	Aug-24
DO (Zero pt)	0.04	mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

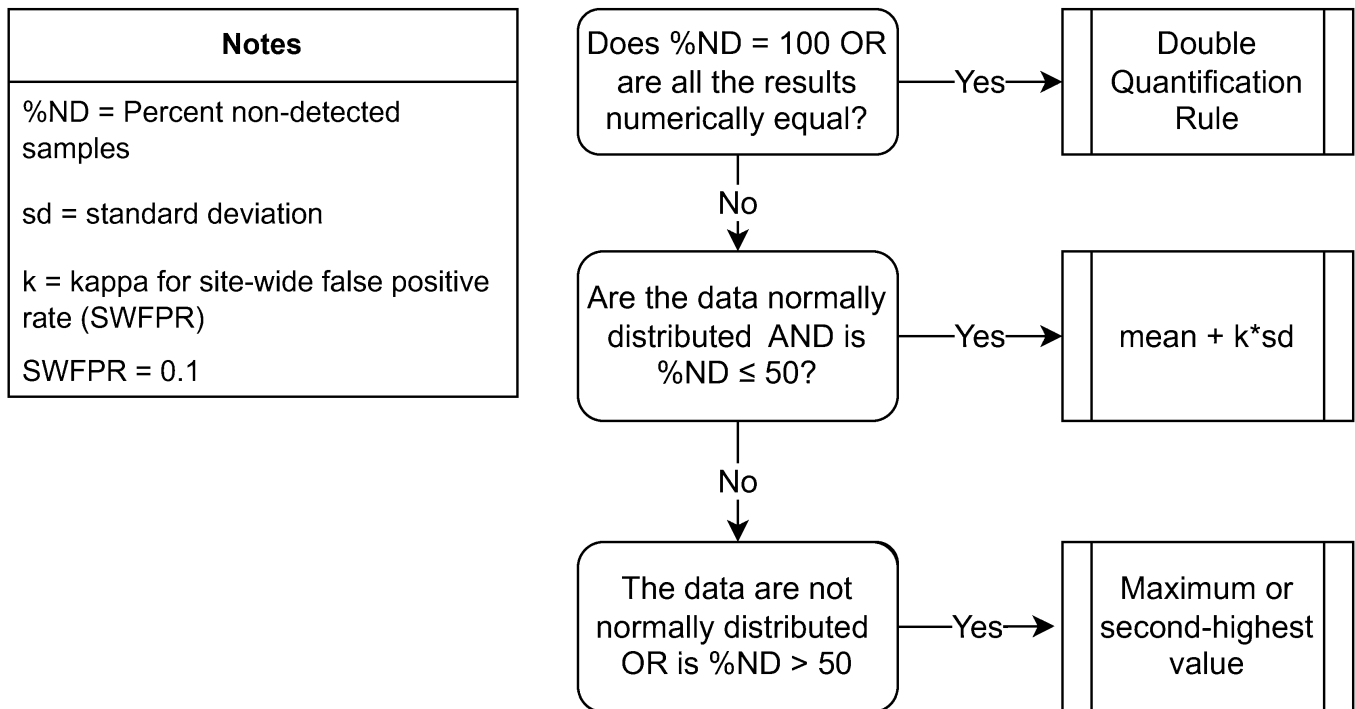
CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	023067-01	3/14/2025
7.00a		s.u.	±0.1 s.u.				MSI	023051-02	2/21/2025
10.00a		s.u.	±0.1 s.u.				MSI	022361-01	12/27/2024
SC 1000		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:	10/31/2023
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Multiparameter Meter Field Calibration Checklist									
Field Personnel: Joe Reed				Location: Duck Creek					
Weather: 40-61°F Partly cloudy				Environment: Grassy					
Multiparameter Water Meter		Make: Horiba	Model: U5000	Serial Number: YL9KJ9HA					
Water Level Meter		Make: Heron	Model: Series 1900	Serial Number: 19FF211192HB					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.00	s.u.	±0.1 s.u.	P	N		MSI	023067-01	3/14/2025
pH 7.00a	7.02	s.u.	±0.1 s.u.	P	N		MSI	023051-02	2/21/2025
pH 10.00a	10.01	s.u.	±0.1 s.u.	P	N		MSI	022361-01	12/27/2024
SC Zero (DI)	0.01	µS/cm	0<25 µS/cm	P	N		Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2020	µS/cm	±5%	P	N		Geotech	3GF1197	Jun-24
ORP	241	mV	±15 mV	P	N		InSitu	3GD927	Jan-24
DO (Zero pt)	0.01	mg/L	±0.1	P	N		Macron	#000228049	8/26/2025
DO (Saturated)	99.1	%	97-100%	P	N		Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.1	NTU	<2 NTU	P	N		Pace Labs	N/A (DI)	N/A (DI)
Approx. every 4 hrs, unless only one well									
ICV (Initial Calibration Verification)					Time: 9:45				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.00	s.u.	±0.15 s.u.	P	N	Geotech	3GB1049	Feb-25	
pH 7.00b	6.99	s.u.	±0.15 s.u.	P	N	Geotech	2GF113	Jun-24	
pH 10.00b	9.99	s.u.	±0.15 s.u.	P	N	Geotech	3GA1134	Jan-25	
SC 1000	1010	µS/cm	±5%	P	N	Ricca	4209A12	Aug-24	
Approx. every 4 hrs, unless only one well									
CCV (Continued Calibration Verification):					Time: 1400				
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		MSI	023067-01	3/14/2025
pH 7.00a	7.01	s.u.	±0.1 s.u.	P	N		MSI	023051-02	2/21/2025
pH 10.00a	10.01	s.u.	±0.1 s.u.	P	N		MSI	022361-01	12/27/2024
SC 1000	1020	µS/cm	±5%	P	N		Ricca	4209A12	Aug-24
DO (Zero pt)	0.02	mg/L	±0.1 mg/L	P	N		Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	P	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: Joseph R Reed				Date: 11/3/23					

APPENDIX B
STATISTICAL METHODOLOGY FOR DETERMINATION
OF BACKGROUND VALUES



When data are not normally distributed or %ND > 50, the maximum value is used if the background sample size is < 60. Where the background sample size is ≥ 60, the achievable per-constituent false positive rates for the maximum and second-highest background values will be compared, and the background value with the achievable per-constituent false positive rate that is closest to, but does not exceed, the target per-constituent false positive rate of 0.015% is used.