Illinois Power Resources Generating, LLC
1500 Eastport Plaza Dr.
Collinsville, IL 62234

January 30, 2025

Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

Re: Duck Creek GMF Pond (IEPA ID: W0578010001-04) 2024 Annual Consolidated Report

Dear Mr. LeCrone:

In accordance with 35 IAC § 845.550, Illinois Power Resources Generating, LLC (IPRG) is submitting the annual consolidated report for the Duck Creek GMF Pond (IEPA ID: W0578010001-04), as enclosed.

Sincerely,

Dianna Tickner
Sr. Director Decommissioning & Demolition

Enclosures

Annual Consolidated Report
Illinois Power Resources Generating, LLC
Duck Creek Power Plant
GMF Pond; IEPA **ID: W0578010001-04**

In accordance with 35 IAC § 845.550, Illinois Power Resources Generating, LLC (IPRG) has prepared the annual consolidated report. The report is provided in three sections as follows:

Section 1
1) Annual CCR fugitive dust control report (Section 845.500(c))

Section 2
2) Annual inspection report (Section 845.540(b)), including:

A) Annual hazard potential classification certification

B) Annual structural stability assessment certification

C) Annual safety factor assessment certification

D) Inflow design flood control system plan certification

Section 3
3) Annual Groundwater Monitoring and Corrective Action Report (Section 845.610(e))

Section 1

Annual CCR Fugitive Dust Control Report

Annual CCR Fugitive Dust Control Report

for

Duck Creek Power Plant

Prepared for:

Illinois Power Resources Generating, LLC

Duck Creek Power Plant
17751 North Cilco Road
Canton, IL 61520

November 2024

Duck Creek Power Plant
ANNUAL CCR FUGITIVE DUST CONTROL REPORT

Reporting Year: 4th Quarter 2023 through 3rd Quarter 2024

Completed by:____Dianna Tickner___ ____Director, Decommissioning & Demolition_

Name Title

This Annual CCR Fugitive Dust Control Report has been prepared for the Duck Creek Power Plant in accordance with 40 CFR 257.80(c). Section 1 provides a description of the actions taken to control CCR fugitive dust at the facility during the reporting year, including a summary of any corrective measures taken. Section 2 provides a record of citizen complaints received concerning CCR fugitive dust at the facility during the reporting year, including a summary of any corrective measures taken.

Section 1 Actions Taken to Control CCR Fugitive Dust

In accordance with the Duck Creek Power Plant CCR Fugitive Dust Control Plan (Plan), the following measures were used to control CCR fugitive dust from becoming airborne at the facility during the reporting year:

CCR Activity	Actions Taken to Control CCR Fugitive Dust
Management of CCR in the facility's CCR units	CCR to be emplaced in the landfill is conditioned before emplacement.
	Cover exposed dry CCR in the landfill.
	Wet management of CCR bottom ash and flue gas desulfurization materials in CCR surface impoundments.
	Water areas of exposed CCR in CCR units, as necessary.
	Naturally occurring grass vegetation in areas of exposed CCR in CCR surface impoundments.
	Apply chemical dust suppressant on areas of exposed CCR in CCR units, as necessary.
Handling of CCR at the facility	Wet sluice CCR bottom ash and flue gas desulfurization materials to CCR surface impoundments.
	CCR bottom ash removed from CCR surface impoundments and loaded into trucks for transport remains conditioned during handling.

Duck Creek Power Plant
ANNUAL CCR FUGITIVE DUST CONTROL REPORT

CCR Activity	Actions Taken to Control CCR Fugitive Dust
Handling of CCR at the facility	Pneumatically convey dry CCR fly ash to storage silos in an enclosed system.
	CCR to be emplaced in the landfill is conditioned before emplacement.
	Load CCR transport trucks from the CCR fly ash silos in a partially enclosed area.
	Load CCR transport trucks from the CCR fly ash silos using a telescoping chute.
	Maintain and operate the bin vent filters on each CCR fly ash silo as needed during fly ash loadout.
	Perform housekeeping, as necessary, in the fly ash loading area.
	Operate fly ash handling system in accordance with good operating practices.
	Maintain and repair as necessary dust controls on the fly ash handling system.
Transportation of CCR at the facility	CCR from the CCR fly ash silos to be emplaced in the landfill is conditioned before emplacement.
	Cover or enclose trucks used to transport CCR fly ash.
	Limit the speed of vehicles to no more than 15 mph on facility roads.
	Cover or enclose trucks used to transport CCR other than fly ash, as necessary.
	Sweep or rinse off the outside of the trucks transporting CCR, as necessary.
	Remove CCR, as necessary, deposited on facility road surfaces during transport.

Based on a review of the Plan and inspections associated with CCR fugitive dust control performed in the reporting year, the control measures identified in the Plan as implemented at the facility effectively minimized CCR from becoming airborne at the facility. No revisions or additions to control measures identified in the Plan were needed.

The Illinois Environmental Protection Agency rule 35 IAC 212.314 does not require fugitive dust controls when the wind speed is greater than 25 mph.

No material changes occurred in the reporting year in site conditions potentially resulting in CCR fugitive dust becoming airborne at the facility that warrant an amendment of the Plan.

Duck Creek ceased operation in December of 2019. Not all the CCR activities that are listed in the table occurred after the plant was permanently shut down. For the activities that did occur, the actions taken to control CCR Fugitive Dust that are listed in the table were followed and were adequate to effectively minimize fugitive dust.

Section 2 Record of Citizen Complaints

No citizen complaints were received regarding CCR fugitive dust at Duck Creek Power Plant in the reporting year.

Section 2

Annual inspection report (Section 845.540(b)), including:

A) Annual hazard potential classification certification, if applicable (Section 845.440)

B) Annual structural stability assessment certification, if applicable (Section 845.450)

C) Annual safety factor assessment certification, if applicable (Section 845.460)

D) Inflow design flood control system plan certification (Section 845.510(c))

ANNUAL INSPECTION BY A QUALIFIED PROFESSIONAL ENGINEER 35 IAC § 845.540
(b)(1) The CCR surface impoundment must be inspected on an annual basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR surface impoundment is consistent with recognized and generally accepted engineering standards. The inspection must, at a minimum, include: A) A review of available information regarding the status and condition of the CCR surface impoundment, including files available in the operating record (e.g., CCR surface impoundment design and construction information required by Sections 845.220(a)(1) and 845.230(d)(2)(A), previous structural stability assessments required under Section 845.450, the results of inspections by a qualified person, and results of previous annual inspections); B) A visual inspection of the CCR surface impoundment to identify signs of distress or malfunction of the CCR surface impoundment and appurtenant structures; C) A visual inspection of any hydraulic structures underlying the base of the CCR surface impoundment or passing through the dike of the CCR surface impoundment for structural integrity and continued safe and reliable operation; D) The annual hazard potential classification certification, if applicable (see Section 845.440); E) The annual structural stability assessment certification, if applicable (see Section 845.450); F) The annual safety factor assessment certification, if applicable (see Section 845.460); and G) The inflow design flood control system plan certification (see Section 845.510(c)).

SITE INFORMATION	
Site Name / Address / Date of Inspection	Duck Creek Power Station Fulton County, Illinois 61520 9/17/2024
Operator Name / Address	Luminant Generation Company LLC 6555 Sierra Drive, Irving, TX 75039
CCR unit	GMF Pond

INSPECTION REPORT 35 IAC § 845.540	
(b)(1)(D) The annual hazard potential classification certification, if applicable (see Section 845.440).	Based on a review of the CCR unit's annual hazard potential classification, the unit is classified as a Class II CCR surface impoundment.
(b)(2)(A) Any changes in geometry of the structure since the previous annual inspection.	Based on a review of the CCR unit's records and visual observation during the on-site inspection, no changes in geometry of the structure have taken place since the previous annual inspection.
(b)(2)(B) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection	None
b)(2)(C) The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection;	See the attached.
b)(2)(D) The storage capacity of the impounding structure at the time of the inspection	Approximately 1100 acre-feet
(b)(2)(E) The approximate volume of the impounded water and CCR contained in the unit at the time of the inspection.	Approximately 900 acre-feet
(b)(2)(F) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit	Based on a review of the CCR unit's records and visual observation during the on-site inspection, there was no appearance of an actual or potential structural weakness of the CCR unit, nor an existing condition that is disrupting or would disrupt the operation and safety of the unit.

INSPECTION REPORT 35 IAC § 845.540	
(b)(2)(G) Any other changes that may have affected the stability or operation of the impounding structure since the previous annual inspection.	Based on a review of the CCR unit's records and visual observation during the on-site inspection, no other changes which may have affected the stability or operation of the CCR unit have taken place since the previous annual inspection.
(b)(1)(G) The inflow design flood control system plan certification (see Section 845.510(c))	Based on a review of the CCR unit's records, the CCR unit is designed, operated, and maintained to adequately manage the flow from the CCR impoundment and control the peak discharge from the inflow design flood.

35 IAC § 845.540 - Annual inspection by a qualified professional engineer.

I, James Knutelski, P.E., certify under penalty of law that the information submitted in this report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the state of Illinois. The information submitted, is to the best of my knowledge and belief, true, accurate and complete. Based on the annual inspection, the design, construction, operation, and maintenance of the CCR Unit is consistent with recognized and generally accepted good engineering standards. Based on a review of the records for the CCR unit and a visual inspection of the unit to document no material changes to the unit, the hazard potential classification was conducted in accordance with the requirements of Section 845.440, the structural stability assessment was conducted in accordance with the requirements of Section 845.450, the safety factor assessment was conducted in accordance with the requirements of Section 845.460, and the inflow design flood control system plan assessment was conducted in accordance with the requirements of Section 845.510.

James Knutelski, PE
Illinois PE No. 062-054206, Expires: 11/30/2025
Date: 12/13/2024

Site Name: Duck Creek Power Station

CCR Unit: GMF Pond

35 IAC § 845.540 (b)(2)(B)		
Instrument ID #	Type	Maximum recorded reading since previous annual inspection (ft)
None		

35 IAC § 845.540 (b)(2)(C)						
	Approximate Depth / Elevation					
Since previous inspection:	Elevation (ft)			Depth (ft)		
	Minimum	Present	Maximum	Minimum	Present	Maximum
Impounded Water		590			1	
CCR	590		620	10		40

Section 3

Annual Groundwater Monitoring and Corrective Action Report (Section 845.610(e))

Prepared for

Illinois Power Resources Generating, LLC

Date

January 31, 2025

Project No.

1940103649-005

2024 35 I.A.C. § 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

GYPSUM MANAGEMENT FACILITY POND

DUCK CREEK POWER PLANT

CANTON, ILLINOIS

IEPA ID NO. W0578010001-04

RAMBOLL Bright ideas. Sustainable change.

2024 35 I.A.C. § 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT DUCK CREEK POWER PLANT GYPSUM MANAGEMENT FACILITY POND

Project name	**Duck Creek Power Plant Gypsum Management Facility Pond**
Project no.	**1940103649-005**
Recipient	**Illinois Power Resources Generating, LLC**
Document type	**Annual Groundwater Monitoring and Corrective Action Report**
Version	**FINAL**
Date	**January 31, 2025**
Prepared by	**Scott S. Woods**
Checked by	**Lauren D. Cook**
Approved by	**Nicole M. Pagano, PG, PE**
Description	**Annual Report required by 35 I.A.C. § 845**

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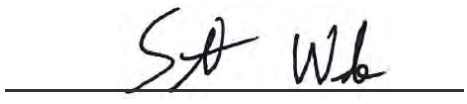
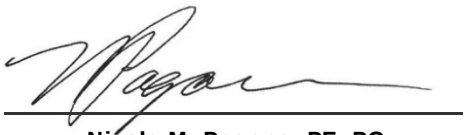


Scott S. Woods
Hydrogeologist



Nicole M. Pagano, PE, PG
Senior Project Manager

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TABLES (IN TEXT)

TABLES (ATTACHED)

FIGURES (ATTACHED)

ATTACHMENTS

ACRONYMS AND ABBREVIATIONS

35 I.A.C.	Title 35 of the Illinois Administrative Code
ASD	Alternative Source Demonstration
CCA	compliance commitment agreement
CCR	coal combustion residuals
CMA	assessment of corrective measures
DCPP	Duck Creek Power Plant
E003	Quarter 4, 2024 sampling event
E004	Quarter 1, 2024 sampling event
E004R	Quarter 1, 2024 resample event
E005	Quarter 2, 2024 sampling event
E006	Quarter 3, 2024 sampling event
E006R	Quarter 3, 2024 resample event
E007	Quarter 4, 2024 sampling event
GMF Pond	Gypsum Management Facility Pond
GWPS	groundwater protection standard
ID	identification
IEPA	Illinois Environmental Protection Agency
IPCB	Illinois Pollution Control Board
IPRG	Illinois Power Resources Generating, LLC
NID	National Inventory of Dams
No.	number
Ramboll	Ramboll Americas Engineering Solutions, Inc.
SI	surface impoundment
SSI	statistically significant increase

EXECUTIVE SUMMARY

This report has been prepared to provide the information required by Title 35 of the Illinois Administrative Code (35 I.A.C.) § 845.610(e) (*Annual Groundwater Monitoring and Corrective Action Report*) for the Gypsum Management Facility Pond (GMF Pond) located at Duck Creek Power Plant (DCPP) near Canton, Illinois. The GMF Pond is recognized by coal combustion residuals (CCR) unit identification (ID) number (No.) 203, Illinois Environmental Protection Agency (IEPA) ID No. W0578010001-04, and National Inventory of Dams (NID) No. IL50573.

As required by 35 I.A.C. § 845, an operating permit application for the GMF Pond was submitted by Illinois Power Resources Generating, LLC (IPRG) to IEPA by October 31, 2021 in accordance with the requirements specified in 35 I.A.C. § 845.230(d) and is pending approval. IPRG entered into a compliance commitment agreement (CCA) with IEPA on December 28, 2022. As specified in the CCA, groundwater monitoring in accordance with the proposed groundwater monitoring plan and sampling methodologies provided in the operating permit application for the GMF Pond commenced in the second quarter of 2023 and quarterly groundwater sampling was conducted in 2024 in accordance with 35 I.A.C. § 845.650. All available groundwater monitoring data collected in 2024 are summarized in **Table 1** (field parameters and analytical results) and **Attachment A** (groundwater elevation data). After the GMF Pond has been issued an approved operating permit, groundwater monitoring shall be conducted in accordance with that operating permit.

In accordance with 35 I.A.C. § 845.610(b)(3)(C) and the statistical analysis plan submitted with the operating permit application (Appendix A of the Groundwater Monitoring Plan [Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2021]), constituent concentrations observed at compliance monitoring wells were evaluated for compliance with the groundwater protection standards (GWPSs) described in 35 I.A.C. § 845.600 to determine exceedances[1] of the GWPS (**Table 2**). The following GWPS exceedances were determined in 2024 (Ramboll, 2024a; Ramboll, 2024b; Ramboll, 2024c)[2]:

- pH in G60L

An Alternative Source Demonstration (ASD) was completed on November 11, 2023 for the exceedance of the GWPS detected during the Quarter 2, 2023 sampling event. The IEPA provided a written response on December 6, 2023 that it did not concur with the ASD. Both of these documents were included in the 2023 Annual Groundwater Monitoring and Corrective Action Report (Ramboll, 2024d). As allowed by 35 I.A.C. § 845.650(e)(7), IRPG filed a petition with the Illinois Pollution Control Board (IPCB; case number 2024-048[3]) for review of IEPA's non-concurrence on January 12, 2024 and requested a stay of the requirements of 35 I.A.C. §§ 845.650(d), 845.660, 845.670, and 845.680 as they apply to the exceedance of the pH GWPS

[1] Throughout this document, "exceedance" or "exceedances" is intended to refer only to potential exceedances of proposed applicable background statistics or Groundwater Protection Standards (GWPSs) as described in the proposed groundwater monitoring program which was submitted to the IEPA on October 31, 2021 as part of IPRG's operating permit application for the GMF Pond. That operating permit application, including the proposed groundwater monitoring program, remains under review by the IEPA and, therefore, IPRG has not identified any actual exceedances.

[2] GWPS exceedances determined after January 31, 2025 will be reported in the Quarter 4, 2024 Groundwater Monitoring Data and Detected Exceedances Report.

[3] https://pcb.illinois.gov/Cases/GetCaseDetailsById?caseId=17457

detected at monitoring well G60L. The request was unopposed by the IEPA and the IPCB granted the stay on February 15, 2024.

An assessment of corrective measures (CMA) was initiated in accordance with 35 I.A.C. § 845.660 on December 11, 2023. A CMA extension request was submitted to IEPA on December 14, 2023 and approved on December 18, 2024. The CMA extension request and IEPA approval letter were included in the 2023 Annual Groundwater Monitoring and Corrective Action Report (Ramboll, 2024d). Due to the stay granted for the exceedance of the pH GWPS detected at monitoring well G60L, the CMA has not been completed.

In accordance with 35 I.A.C. § 845.610(b)(3)(B), constituent concentrations observed at compliance monitoring wells were also evaluated quarterly for exceedances over statistical background levels (**Attachment B**).

1. INTRODUCTION

This report has been prepared by Ramboll on behalf of IPRG, to provide the information required by 35 I.A.C. § 845.610(e) for the GMF Pond located at DCPP near Canton, Illinois. The owner or operator of a CCR Surface Impoundment (SI) must prepare and submit to IEPA by January 31st of each year an Annual Groundwater Monitoring and Corrective Action Report for the preceding calendar year as part of the Annual Consolidated Report required by 35 I.A.C. § 845.550. The Annual Groundwater Monitoring and Corrective Action Report shall document the status of the groundwater monitoring and corrective action plan for the CCR SI (**Section 2**), summarize key actions completed, including the status of permit applications and Agency approvals (**Section 3**), describe any problems encountered and actions to resolve the problems (**Section 4**), and project key activities for the upcoming year (**Section 5**).

At a minimum, the annual report must contain the following information, to the extent available:

A. A map, aerial image, or diagram showing the CCR SI and all background (or upgradient) and [downgradient] compliance monitoring wells, including the well identification numbers, that are part of the groundwater monitoring program for the CCR SI (**Figure 1**), and a visual delineation of any exceedances of the [groundwater protection standard] GWPS (**Figures 2 and 3**).

B. 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).

C. A potentiometric surface map for each groundwater elevation sampling event required by 35 I.A.C. § 845.650(b)(2) (**Figures 4 through 12**).

D. In addition to all the monitoring data obtained under 35 I.A.C. §§ 845.600-680, a summary including the number of groundwater samples that were collected for analysis for each background and [downgradient] compliance well, and the dates the samples were collected (**Section 3.1** and **Table A**).

E. A narrative discussion of any statistically significant increases (SSIs) over background levels for the constituents listed in 35 I.A.C. § 845.600 (**Section 3.3** and **Attachment B**).

F. Other information required to be included in the annual report as specified in 35 I.A.C. §§ 845.600-680.

A section at the beginning of the annual report must provide an overview of the current status of the groundwater monitoring program and corrective action plan for the CCR SI (see **Executive Summary**). At a minimum, the summary must:

A. Specify whether groundwater monitoring data shows an SSI over background concentrations for one or more constituents listed in 35 I.A.C. § 845.600.

B. Identify those constituents having an SSI over background concentrations and the names of the monitoring wells associated with the SSI(s).

C. Specify whether there have been any exceedances of the GWPS for one or more constituents listed in 35 I.A.C. § 845.600.

D. Identify those constituents with exceedances of the GWPS in 35 I.A.C. § 845.600 and the names of the monitoring wells associated with the exceedance.

E. Provide the date when the assessment of corrective measures was initiated for the CCR SI.

F. Provide the date when the assessment of corrective measures was completed for the CCR SI.

G. Specify whether a remedy was selected under 35 I.A.C. § 845.670 during the current annual reporting period, and if so, the date of remedy selection.

H. Specify whether remedial activities were initiated or are ongoing under 35 I.A.C. § 845.780 during the current annual reporting period.

This report summarizes the required information for the DCPP GMF Pond for calendar year 2024.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

An operating permit application for the GMF Pond was submitted by IPRG to IEPA by October 31, 2021 in accordance with the requirements specified in 35 I.A.C. § 845.230(d) and is pending approval. IPRG entered into a CCA with IEPA on December 28, 2022. As specified in the CCA, groundwater monitoring in accordance with the proposed groundwater monitoring plan and sampling methodologies provided in the operating permit application for the GMF Pond commenced in the second quarter of 2023. After the GMF Pond has been issued an approved operating permit, groundwater monitoring shall be conducted in accordance with that operating permit. As specified in the CCA, groundwater sampling requirements that apply to the CCR SI under other existing permit programs will become void upon issuance of an approved operating permit pursuant to 35 I.A.C § 845.

A construction permit application for the GMF Pond was also submitted by IPRG to IEPA on January 28, 2022 in accordance with the requirements specified in 35 I.A.C. § 845.220(a) and (d) and is pending approval.

As noted in the **Executive Summary**, GWPS exceedances were determined for the GMF Pond in 2024. An ASD was completed for these GWPS exceedances on November 11, 2023. The IEPA provided a written response on December 6, 2023 that it did not concur with the ASD. Both of these documents were included in the 2023 Annual Groundwater Monitoring and Corrective Action Report (Ramboll, 2024d). A CMA was initiated on December 11, 2023. As allowed by 35 I.A.C. § 845.650(e)(7), IRPG filed a petition with the IPCB (case number 2024-048) for review of IEPA's non-concurrence on January 12, 2024 and requested a stay of the requirements of 35 I.A.C. §§ 845.650(d), 845.660, 845.670, and 845.680 as they apply to the exceedance of the GWPS detected at monitoring well G60L. The request was unopposed by the IEPA and the IPCB granted the stay on February 15, 2024.

3. KEY ACTIONS COMPLETED IN 2024

The proposed 35 I.A.C. § 845 monitoring system is presented in **Figure 1**. No wells were installed or decommissioned in 2024.

Monthly groundwater level elevations were collected in 2024 as required by 35 I.A.C. § 845.650(b)(2). **Attachment A** summarizes the groundwater elevation data collected in 2024. Potentiometric surfaces for January through December 2024 are included in **Figures 4 through 15**.

A summary of the samples collected in 2024 is included in **Section 3.1**. Narrative discussions of exceedances of GWPSs and background are included in **Section 3.2** and **Section 3.3**, respectively. Statistical procedures used to evaluate groundwater results are provided in Appendix A of the Groundwater Monitoring Plan provided in the operating permit application (Ramboll, 2021).

3.1 Sample and Analysis Summary

One groundwater sample was collected from each background and compliance well during each quarterly monitoring event in 2024. All samples were collected and analyzed in accordance with the Groundwater Monitoring Plan provided in the operating permit application (Ramboll, 2021). A summary of the samples collected from background and compliance monitoring wells in 2024 is included in **Table A** on the following page. **Table 1** is a summary of the field parameters and analytical results from the 2024 sampling events. Laboratory analytical reports and field data sheets were provided in the quarterly Groundwater Monitoring Data and Detected Exceedances Reports for Quarters 1 through 3 (Ramboll, 2024a; Ramboll, 2024b; Ramboll 2024c); therefore, these reports are not attached to this annual report to avoid reproduction of lengthy data transmittals that have been previously provided in hardcopy. Laboratory report and field data sheets will be provided in the fourth quarter Groundwater Monitoring Data and Detected Exceedance Report, therefore, will not be attached to this annual report for similar reasons.

Table A. 35 I.A.C. § 845 Monitoring Program Summary for 2024

Event ID	Sampling Dates [1, 2, 3]	Analytical Data Receipt Date [4]	Exceedance Determination Date [4]	ASD Completion Date
E003	October 19– 31, 2023	January 4, 2024	March 4, 2024 [5]	NA
E004	January 19 – February 1, 2024	March 15, 2024	May 14, 2024	NA
E004R [6]	February 6, 2024	February 28, 2024	NA	NA
E005	April 17 - 24, 2024	June 24, 2024	August 23, 2024	NA
E006	July 23 – August 1, 2024	August 30, 2024	October 29, 2024	NA
E006R [7]	September 12, 2024	September 24, 2024	NA	NA
E007	October 15 – 24, 2024	December 6 2024	TBD	TBD

Notes:

ASD: Alternative Source Demonstration

NA: not applicable

TBD: to be determined after January 31, 2025

[1] All samples were analyzed for the parameters listed in 35 I.A.C. § 845.600, calcium, and turbidity.

[2] The following background wells were sampled for each event: G02S, G50S, and G51S

[3] The following compliance wells were sampled for each event: G54L, G54S, G57S, G60L, G60S, G64L, and G64S

[4] GWPS exceedances determined after January 31, 2025 will be reported in the Quarter 4, 2024 Groundwater Monitoring Data and Detected Exceedances Report.

[5] Statistical determinations were completed in 2024 and are included in the 2024 Annual Groundwater Monitoring and Corrective Action Report for completeness. Analytical data from 2023 sampling events used in statistical determinations are included in the Quarter 4, 2023 Groundwater Monitoring Data and Detected Exceedances Report.

[6] Compliance well G54S sampled for pH

[7] Compliance well G60L sampled for cobalt

3.2 Exceedances of GWPS

In accordance with 35 I.A.C. § 845.610(b)(3)(C), the constituent concentrations observed at compliance monitoring wells identified as Statistical Results in **Table 2** were compared with the GWPSs described in 35 I.A.C. § 845.600 to determine exceedances of the GWPS. The following exceedances of the GWPSs were determined and are shown on **Figures 2 and 3**[4]:

- pH in G60L

Response actions for these exceedances are summarized in **Section 2**.

3.3 Exceedances of Background

In accordance with 35 I.A.C. § 845.610(b)(3)(B), constituent concentrations observed at compliance monitoring wells were also evaluated quarterly for exceedances over statistical background levels for the constituents listed in 35 I.A.C. § 845.600. **Attachment B** shows the constituent concentrations compared to statistical background levels.

[4] GWPS exceedances determined after January 31, 2025 will be reported in the Quarter 4, 2024 Groundwater Monitoring Data and Detected Exceedances Report.

4. PROBLEMS ENCOUNTERED AND ACTIONS TO RESOLVE THE PROBLEMS

Quarterly groundwater monitoring was completed in 2024. Groundwater samples were collected and analyzed in accordance with the Groundwater Monitoring Plan provided in the operating permit application (Ramboll, 2021) and all data were accepted. After the GMF Pond has been issued an approved operating permit, groundwater monitoring shall be conducted in accordance with that operating permit.

5. KEY ACTIVITIES PLANNED FOR 2025

The following key activities are planned for 2025:

- Continuation of groundwater monitoring in accordance with the proposed groundwater monitoring plan and sampling methodologies provided in the operating permit application for the GMF Pond. After the GMF Pond has been issued an approved operating permit, groundwater monitoring shall be conducted in accordance with that operating permit. Groundwater monitoring will include:
  - Monthly groundwater elevations
  - Quarterly groundwater sampling
- Complete evaluation of analytical data from the compliance wells to determine whether exceedances above GWPSs have occurred.
- If a GWPS exceedance is identified, potential alternative sources (*i.e.,* a source other than the CCR unit caused the GWPS exceedance or that the exceedance resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality) will be evaluated.
  - If an alternative source is identified to be the cause of the GWPS exceedance, a written demonstration will be completed within 60 days of determination and included in the 2025 Annual Groundwater Monitoring and Corrective Action Report.
  - If an alternative source(s) is not identified to be the cause of the GWPS exceedance, the applicable requirements of 35 I.A.C. § 845.660 will be met.

6. REFERENCES

Illinois Administrative Code, Title 35, Subtitle G, Chapter I, Subchapter J, Part 845: Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments, effective April 21,2001.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2021. *Groundwater Monitoring Plan.* Duck Creek Power Plant, Gypsum Management Facility Pond, Canton, Illinois. Illinois Power Resources Generating, LLC. October 25, 2021.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2024a. 35 I.A.C. § 845.610(B)(3)(D) Groundwater Monitoring Data and Detected Exceedances, 2024 Quarter 1, Gypsum Management Facility Pond, Duck Creek Power Plant, Canton, Illinois. May 14, 2024. https://www.luminant.com/documents/ccr/il-ccr/Duck-Creek/2024/2024-Duck%20Creek%20GMF%202024%201st%20qtr%2035%20IAC%20845%20GW%20report-Duck%20Creek-GMF%20Pond-W0578010001%E2%80%9004.pdf

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2024b. 35 I.A.C. § 845.610(B)(3)(D) Groundwater Monitoring Data and Detected Exceedances, 2024 Quarter 2, Gypsum Management Facility Pond, Duck Creek Power Plant, Canton, Illinois. August 23, 2024. https://www.luminant.com/documents/ccr/il-ccr/Duck-Creek/2024/2024-Duck%20Creek%20GMF%202024%202nd%20qtr%2035%20IAC%20845%20GW%20report-Duck%20Creek-GMF%20Pond-W0578010001%E2%80%9004.pdf

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2024c. 35 I.A.C. § 845.610(B)(3)(D) Groundwater Monitoring Data and Detected Exceedances, 2024 Quarter 3, Gypsum Management Facility Pond, Duck Creek Power Plant, Canton, Illinois. October 29, 2024. https://www.luminant.com/documents/ccr/il-ccr/Duck-Creek/2024/2024-Duck%20Creek%20GMF%202024%203rd%20qtr%2035%20IAC%20845%20GW%20report-Duck%20Creek-GMF%20Pond-W0578010001%E2%80%9004.pdf

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2024d. 2023 35 I.A.C. § 845 Annual Groundwater Monitoring and Corrective Action Report, Gypsum Management Facility Pond, Duck Creek Power Plant, Canton, Illinois, IEPA ID No. W0578010001-04. January 31, 2024. https://www.luminant.com/documents/ccr/il-ccr/Duck-Creek/2023/2023-Duck%20Creek%20GMF%20Part%20845%20Annual%20Cons%20Rpt-Duck%20Creek-GMF%20Pond-W0578010001%E2%80%9004.pdf

TABLES

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G02S	Background	E004	01/29/2024	Antimony, total	0.00043 U	mg/L
G02S	Background	E004	01/29/2024	Arsenic, total	0.00580	mg/L
G02S	Background	E004	01/29/2024	Barium, total	0.170	mg/L
G02S	Background	E004	01/29/2024	Beryllium, total	0.00059 U	mg/L
G02S	Background	E004	01/29/2024	Boron, total	0.0370 J+	mg/L
G02S	Background	E004	01/29/2024	Cadmium, total	0.00074 U	mg/L
G02S	Background	E004	01/29/2024	Calcium, total	97.0	mg/L
G02S	Background	E004	01/29/2024	Chloride, total	4.8 U	mg/L
G02S	Background	E004	01/29/2024	Chromium, total	0.0028 U	mg/L
G02S	Background	E004	01/29/2024	Cobalt, total	0.00048 U	mg/L
G02S	Background	E004	01/29/2024	Dissolved Oxygen	0	mg/L
G02S	Background	E004	01/29/2024	Fluoride, total	0.257 J-	mg/L
G02S	Background	E004	01/29/2024	Lead, total	0.00028	mg/L
G02S	Background	E004	01/29/2024	Lithium, total	0.005 U	mg/L
G02S	Background	E004	01/29/2024	Mercury, total	0.000240	mg/L
G02S	Background	E004	01/29/2024	Molybdenum, total	0.00074 U	mg/L
G02S	Background	E004	01/29/2024	Oxidation Reduction Potential	-66.0	mV
G02S	Background	E004	01/29/2024	pH (field)	6.5	SU
G02S	Background	E004	01/29/2024	Radium 226 + Radium 228, total	1.01	pCi/L
G02S	Background	E004	01/29/2024	Selenium, total	0.00074 U	mg/L
G02S	Background	E004	01/29/2024	Specific Conductance @ 25C (field)	807	micromhos/cm
G02S	Background	E004	01/29/2024	Sulfate, total	0.18 U	mg/L
G02S	Background	E004	01/29/2024	Temperature	8.40	degrees C
G02S	Background	E004	01/29/2024	Thallium, total	0.00038 U	mg/L
G02S	Background	E004	01/29/2024	Total Dissolved Solids	340 J+	mg/L
G02S	Background	E004	01/29/2024	Turbidity, field	52.6	NTU
G50S	Background	E004	01/19/2024	Antimony, total	0.00043 U	mg/L
G50S	Background	E004	01/19/2024	Arsenic, total	0.00069 U	mg/L
G50S	Background	E004	01/19/2024	Barium, total	0.0820	mg/L
G50S	Background	E004	01/19/2024	Beryllium, total	0.00059 U	mg/L
G50S	Background	E004	01/19/2024	Boron, total	0.0180	mg/L
G50S	Background	E004	01/19/2024	Cadmium, total	0.00074 U	mg/L
G50S	Background	E004	01/19/2024	Calcium, total	89.0	mg/L
G50S	Background	E004	01/19/2024	Chloride, total	9.90	mg/L
G50S	Background	E004	01/19/2024	Chromium, total	0.0028 U	mg/L
G50S	Background	E004	01/19/2024	Cobalt, total	0.00049	mg/L
G50S	Background	E004	01/19/2024	Dissolved Oxygen	2.20	mg/L
G50S	Background	E004	01/19/2024	Fluoride, total	0.275	mg/L
G50S	Background	E004	01/19/2024	Lead, total	0.00053	mg/L
G50S	Background	E004	01/19/2024	Lithium, total	0.006	mg/L
G50S	Background	E004	01/19/2024	Mercury, total	0.00014 U	mg/L
G50S	Background	E004	01/19/2024	Molybdenum, total	0.00092	mg/L
G50S	Background	E004	01/19/2024	Oxidation Reduction Potential	-25.0	mV
G50S	Background	E004	01/19/2024	pH (field)	6.8	SU
G50S	Background	E004	01/19/2024	Radium 226 + Radium 228, total	1.22	pCi/L
G50S	Background	E004	01/19/2024	Selenium, total	0.00074 U	mg/L

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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G50S	Background	E004	01/19/2024	Specific Conductance @ 25C (field)	673	micromhos/cm
G50S	Background	E004	01/19/2024	Sulfate, total	39.0	mg/L
G50S	Background	E004	01/19/2024	Temperature	9.90	degrees C
G50S	Background	E004	01/19/2024	Thallium, total	0.00038 U	mg/L
G50S	Background	E004	01/19/2024	Total Dissolved Solids	420	mg/L
G50S	Background	E004	01/19/2024	Turbidity, field	53.8	NTU
G51S	Background	E004	01/19/2024	Antimony, total	0.00043 U	mg/L
G51S	Background	E004	01/19/2024	Arsenic, total	0.00530	mg/L
G51S	Background	E004	01/19/2024	Barium, total	0.110	mg/L
G51S	Background	E004	01/19/2024	Beryllium, total	0.00059 U	mg/L
G51S	Background	E004	01/19/2024	Boron, total	0.0140	mg/L
G51S	Background	E004	01/19/2024	Cadmium, total	0.00074 U	mg/L
G51S	Background	E004	01/19/2024	Calcium, total	98.0	mg/L
G51S	Background	E004	01/19/2024	Chloride, total	13.0	mg/L
G51S	Background	E004	01/19/2024	Chromium, total	0.0029	mg/L
G51S	Background	E004	01/19/2024	Cobalt, total	0.00096	mg/L
G51S	Background	E004	01/19/2024	Dissolved Oxygen	0	mg/L
G51S	Background	E004	01/19/2024	Fluoride, total	0.223	mg/L
G51S	Background	E004	01/19/2024	Lead, total	0.0130	mg/L
G51S	Background	E004	01/19/2024	Lithium, total	0.0053	mg/L
G51S	Background	E004	01/19/2024	Mercury, total	0.00014 U	mg/L
G51S	Background	E004	01/19/2024	Molybdenum, total	0.00120	mg/L
G51S	Background	E004	01/19/2024	Oxidation Reduction Potential	-60.0	mV
G51S	Background	E004	01/19/2024	pH (field)	5.8	SU
G51S	Background	E004	01/19/2024	Radium 226 + Radium 228, total	0.482	pCi/L
G51S	Background	E004	01/19/2024	Selenium, total	0.00074 U	mg/L
G51S	Background	E004	01/19/2024	Specific Conductance @ 25C (field)	798	micromhos/cm
G51S	Background	E004	01/19/2024	Sulfate, total	58.0	mg/L
G51S	Background	E004	01/19/2024	Temperature	5.90	degrees C
G51S	Background	E004	01/19/2024	Thallium, total	0.00038 U	mg/L
G51S	Background	E004	01/19/2024	Total Dissolved Solids	400	mg/L
G51S	Background	E004	01/19/2024	Turbidity, field	943	NTU
G54L	Compliance	E004	01/30/2024	Antimony, total	0.00043 U	mg/L
G54L	Compliance	E004	01/30/2024	Arsenic, total	0.00240	mg/L
G54L	Compliance	E004	01/30/2024	Barium, total	0.220	mg/L
G54L	Compliance	E004	01/30/2024	Beryllium, total	0.00059 U	mg/L
G54L	Compliance	E004	01/30/2024	Boron, total	0.0180 J+	mg/L
G54L	Compliance	E004	01/30/2024	Cadmium, total	0.00074 U	mg/L
G54L	Compliance	E004	01/30/2024	Calcium, total	200	mg/L
G54L	Compliance	E004	01/30/2024	Chloride, total	45.0	mg/L
G54L	Compliance	E004	01/30/2024	Chromium, total	0.0028 U	mg/L
G54L	Compliance	E004	01/30/2024	Cobalt, total	0.0011	mg/L
G54L	Compliance	E004	01/30/2024	Dissolved Oxygen	1.50	mg/L
G54L	Compliance	E004	01/30/2024	Fluoride, total	0.192	mg/L
G54L	Compliance	E004	01/30/2024	Lead, total	0.00022 U	mg/L
G54L	Compliance	E004	01/30/2024	Lithium, total	0.005 U	mg/L

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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G54L	Compliance	E004	01/30/2024	Mercury, total	0.00014 U	mg/L
G54L	Compliance	E004	01/30/2024	Molybdenum, total	0.00074 U	mg/L
G54L	Compliance	E004	01/30/2024	Oxidation Reduction Potential	-30.0	mV
G54L	Compliance	E004	01/30/2024	pH (field)	6.8	SU
G54L	Compliance	E004	01/30/2024	Radium 226 + Radium 228, total	0.696	pCi/L
G54L	Compliance	E004	01/30/2024	Selenium, total	0.00074 U	mg/L
G54L	Compliance	E004	01/30/2024	Specific Conductance @ 25C (field)	1,060	micromhos/cm
G54L	Compliance	E004	01/30/2024	Sulfate, total	120	mg/L
G54L	Compliance	E004	01/30/2024	Temperature	10.8	degrees C
G54L	Compliance	E004	01/30/2024	Thallium, total	0.00038 U	mg/L
G54L	Compliance	E004	01/30/2024	Total Dissolved Solids	880	mg/L
G54L	Compliance	E004	01/30/2024	Turbidity, field	0 U	NTU
G54S	Compliance	E004	01/19/2024	Antimony, total	0.00043 U	mg/L
G54S	Compliance	E004	01/19/2024	Arsenic, total	0.00100	mg/L
G54S	Compliance	E004	01/19/2024	Barium, total	0.200	mg/L
G54S	Compliance	E004	01/19/2024	Beryllium, total	0.00059 U	mg/L
G54S	Compliance	E004	01/19/2024	Boron, total	0.0290	mg/L
G54S	Compliance	E004	01/19/2024	Cadmium, total	0.00074 U	mg/L
G54S	Compliance	E004	01/19/2024	Calcium, total	120	mg/L
G54S	Compliance	E004	01/19/2024	Chloride, total	4.8 U	mg/L
G54S	Compliance	E004	01/19/2024	Chromium, total	0.0028 U	mg/L
G54S	Compliance	E004	01/19/2024	Cobalt, total	0.00048 U	mg/L
G54S	Compliance	E004	01/19/2024	Dissolved Oxygen	4.10	mg/L
G54S	Compliance	E004	01/19/2024	Fluoride, total	0.21	mg/L
G54S	Compliance	E004	01/19/2024	Lead, total	0.00022 U	mg/L
G54S	Compliance	E004	01/19/2024	Lithium, total	0.0077	mg/L
G54S	Compliance	E004	01/19/2024	Mercury, total	0.00014 U	mg/L
G54S	Compliance	E004	01/19/2024	Molybdenum, total	0.00110	mg/L
G54S	Compliance	E004	01/19/2024	Oxidation Reduction Potential	-40.0	mV
G54S	Compliance	E004	01/19/2024	pH (field)	6.2	SU
G54S	Compliance	E004R	02/06/2024	pH (field)	7.0	SU
G54S	Compliance	E004	01/19/2024	Radium 226 + Radium 228, total	1.32	pCi/L
G54S	Compliance	E004	01/19/2024	Selenium, total	0.00074 U	mg/L
G54S	Compliance	E004	01/19/2024	Specific Conductance @ 25C (field)	974	micromhos/cm
G54S	Compliance	E004	01/19/2024	Sulfate, total	34.0	mg/L
G54S	Compliance	E004	01/19/2024	Temperature	8.90	degrees C
G54S	Compliance	E004	01/19/2024	Thallium, total	0.00038 U	mg/L
G54S	Compliance	E004	01/19/2024	Total Dissolved Solids	540	mg/L
G54S	Compliance	E004	01/19/2024	Turbidity, field	3.60	NTU
G57S	Compliance	E004	01/26/2024	Antimony, total	0.00043 U	mg/L
G57S	Compliance	E004	01/26/2024	Arsenic, total	0.00069 U	mg/L
G57S	Compliance	E004	01/26/2024	Barium, total	0.190	mg/L
G57S	Compliance	E004	01/26/2024	Beryllium, total	0.00059 U	mg/L
G57S	Compliance	E004	01/26/2024	Boron, total	0.0071 U	mg/L
G57S	Compliance	E004	01/26/2024	Cadmium, total	0.00074 U	mg/L
G57S	Compliance	E004	01/26/2024	Calcium, total	180	mg/L

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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G57S	Compliance	E004	01/26/2024	Chloride, total	16.0	mg/L
G57S	Compliance	E004	01/26/2024	Chromium, total	0.0028 U	mg/L
G57S	Compliance	E004	01/26/2024	Cobalt, total	0.00061	mg/L
G57S	Compliance	E004	01/26/2024	Dissolved Oxygen	2.20	mg/L
G57S	Compliance	E004	01/26/2024	Fluoride, total	0.267	mg/L
G57S	Compliance	E004	01/26/2024	Lead, total	0.00077	mg/L
G57S	Compliance	E004	01/26/2024	Lithium, total	0.005 U	mg/L
G57S	Compliance	E004	01/26/2024	Mercury, total	0.00014 U	mg/L
G57S	Compliance	E004	01/26/2024	Molybdenum, total	0.00074 U	mg/L
G57S	Compliance	E004	01/26/2024	Oxidation Reduction Potential	82.0	mV
G57S	Compliance	E004	01/26/2024	pH (field)	6.8	SU
G57S	Compliance	E004	01/26/2024	Radium 226 + Radium 228, total	0.788	pCi/L
G57S	Compliance	E004	01/26/2024	Selenium, total	0.00074 U	mg/L
G57S	Compliance	E004	01/26/2024	Specific Conductance @ 25C (field)	1,200	micromhos/cm
G57S	Compliance	E004	01/26/2024	Sulfate, total	50.0	mg/L
G57S	Compliance	E004	01/26/2024	Temperature	9.90	degrees C
G57S	Compliance	E004	01/26/2024	Thallium, total	0.00038 U	mg/L
G57S	Compliance	E004	01/26/2024	Total Dissolved Solids	820	mg/L
G57S	Compliance	E004	01/26/2024	Turbidity, field	104	NTU
G60L	Compliance	E004	01/25/2024	Antimony, total	0.00043 U	mg/L
G60L	Compliance	E004	01/25/2024	Arsenic, total	0.00069 U	mg/L
G60L	Compliance	E004	01/25/2024	Barium, total	0.0330	mg/L
G60L	Compliance	E004	01/25/2024	Beryllium, total	0.00059 U	mg/L
G60L	Compliance	E004	01/25/2024	Boron, total	0.0460 J+	mg/L
G60L	Compliance	E004	01/25/2024	Cadmium, total	0.00074 U	mg/L
G60L	Compliance	E004	01/25/2024	Calcium, total	100	mg/L
G60L	Compliance	E004	01/25/2024	Chloride, total	11.0	mg/L
G60L	Compliance	E004	01/25/2024	Chromium, total	0.0028 U	mg/L
G60L	Compliance	E004	01/25/2024	Cobalt, total	0.00870	mg/L
G60L	Compliance	E004	01/25/2024	Dissolved Oxygen	1.50	mg/L
G60L	Compliance	E004	01/25/2024	Fluoride, total	0.095	mg/L
G60L	Compliance	E004	01/25/2024	Lead, total	0.00054	mg/L
G60L	Compliance	E004	01/25/2024	Lithium, total	0.005 U	mg/L
G60L	Compliance	E004	01/25/2024	Mercury, total	0.00014 U	mg/L
G60L	Compliance	E004	01/25/2024	Molybdenum, total	0.00074 U	mg/L
G60L	Compliance	E004	01/25/2024	Oxidation Reduction Potential	68.0	mV
G60L	Compliance	E004	01/25/2024	pH (field)	5.6	SU
G60L	Compliance	E004	01/25/2024	Radium 226 + Radium 228, total	1.16	pCi/L
G60L	Compliance	E004	01/25/2024	Selenium, total	0.00074 U	mg/L
G60L	Compliance	E004	01/25/2024	Specific Conductance @ 25C (field)	915	micromhos/cm
G60L	Compliance	E004	01/25/2024	Sulfate, total	150	mg/L
G60L	Compliance	E004	01/25/2024	Temperature	10.5	degrees C
G60L	Compliance	E004	01/25/2024	Thallium, total	0.00038 U	mg/L
G60L	Compliance	E004	01/25/2024	Total Dissolved Solids	540	mg/L
G60L	Compliance	E004	01/25/2024	Turbidity, field	230	NTU
G60S	Compliance	E004	01/25/2024	Antimony, total	0.00043 U	mg/L

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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G60S	Compliance	E004	01/25/2024	Arsenic, total	0.00990	mg/L
G60S	Compliance	E004	01/25/2024	Barium, total	0.200	mg/L
G60S	Compliance	E004	01/25/2024	Beryllium, total	0.00059 U	mg/L
G60S	Compliance	E004	01/25/2024	Boron, total	0.0340 J+	mg/L
G60S	Compliance	E004	01/25/2024	Cadmium, total	0.00074 U	mg/L
G60S	Compliance	E004	01/25/2024	Calcium, total	170	mg/L
G60S	Compliance	E004	01/25/2024	Chloride, total	5.20	mg/L
G60S	Compliance	E004	01/25/2024	Chromium, total	0.0150	mg/L
G60S	Compliance	E004	01/25/2024	Cobalt, total	0.00640	mg/L
G60S	Compliance	E004	01/25/2024	Dissolved Oxygen	7.60	mg/L
G60S	Compliance	E004	01/25/2024	Fluoride, total	0.203	mg/L
G60S	Compliance	E004	01/25/2024	Lead, total	0.0150	mg/L
G60S	Compliance	E004	01/25/2024	Lithium, total	0.013	mg/L
G60S	Compliance	E004	01/25/2024	Mercury, total	0.00014 U	mg/L
G60S	Compliance	E004	01/25/2024	Molybdenum, total	0.00200	mg/L
G60S	Compliance	E004	01/25/2024	Oxidation Reduction Potential	211	mV
G60S	Compliance	E004	01/25/2024	pH (field)	7.2	SU
G60S	Compliance	E004	01/25/2024	Radium 226 + Radium 228, total	6.32	pCi/L
G60S	Compliance	E004	01/25/2024	Selenium, total	0.00074 U	mg/L
G60S	Compliance	E004	01/25/2024	Specific Conductance @ 25C (field)	1,080	micromhos/cm
G60S	Compliance	E004	01/25/2024	Sulfate, total	71.0	mg/L
G60S	Compliance	E004	01/25/2024	Temperature	8.40	degrees C
G60S	Compliance	E004	01/25/2024	Thallium, total	0.00038 U	mg/L
G60S	Compliance	E004	01/25/2024	Total Dissolved Solids	580	mg/L
G60S	Compliance	E004	01/25/2024	Turbidity, field	30.7	NTU
G64L	Compliance	E004	02/01/2024	Antimony, total	0.00043 U	mg/L
G64L	Compliance	E004	02/01/2024	Arsenic, total	0.00069 U	mg/L
G64L	Compliance	E004	02/01/2024	Barium, total	0.110	mg/L
G64L	Compliance	E004	02/01/2024	Beryllium, total	0.00059 U	mg/L
G64L	Compliance	E004	02/01/2024	Boron, total	0.01 U	mg/L
G64L	Compliance	E004	02/01/2024	Cadmium, total	0.00074 U	mg/L
G64L	Compliance	E004	02/01/2024	Calcium, total	120	mg/L
G64L	Compliance	E004	02/01/2024	Chloride, total	3.00	mg/L
G64L	Compliance	E004	02/01/2024	Chromium, total	0.0028 U	mg/L
G64L	Compliance	E004	02/01/2024	Cobalt, total	0.00048 U	mg/L
G64L	Compliance	E004	02/01/2024	Dissolved Oxygen	1.40	mg/L
G64L	Compliance	E004	02/01/2024	Fluoride, total	0.301	mg/L
G64L	Compliance	E004	02/01/2024	Lead, total	0.00022 U	mg/L
G64L	Compliance	E004	02/01/2024	Lithium, total	0.005 U	mg/L
G64L	Compliance	E004	02/01/2024	Mercury, total	0.00014 U	mg/L
G64L	Compliance	E004	02/01/2024	Molybdenum, total	0.00096	mg/L
G64L	Compliance	E004	02/01/2024	Oxidation Reduction Potential	128	mV
G64L	Compliance	E004	02/01/2024	pH (field)	7.2	SU
G64L	Compliance	E004	02/01/2024	Radium 226 + Radium 228, total	0.724	pCi/L
G64L	Compliance	E004	02/01/2024	Selenium, total	0.00074 U	mg/L
G64L	Compliance	E004	02/01/2024	Specific Conductance @ 25C (field)	877	micromhos/cm

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G64L	Compliance	E004	02/01/2024	Sulfate, total	25.0	mg/L
G64L	Compliance	E004	02/01/2024	Temperature	13.0	degrees C
G64L	Compliance	E004	02/01/2024	Thallium, total	0.00038 U	mg/L
G64L	Compliance	E004	02/01/2024	Total Dissolved Solids	500	mg/L
G64L	Compliance	E004	02/01/2024	Turbidity, field	0 U	NTU
G64S	Compliance	E004	01/25/2024	Antimony, total	0.00043 U	mg/L
G64S	Compliance	E004	01/25/2024	Arsenic, total	0.00100	mg/L
G64S	Compliance	E004	01/25/2024	Barium, total	0.160	mg/L
G64S	Compliance	E004	01/25/2024	Beryllium, total	0.00059 U	mg/L
G64S	Compliance	E004	01/25/2024	Boron, total	0.0230 J+	mg/L
G64S	Compliance	E004	01/25/2024	Cadmium, total	0.00074 U	mg/L
G64S	Compliance	E004	01/25/2024	Calcium, total	98.0	mg/L
G64S	Compliance	E004	01/25/2024	Chloride, total	4.8 U	mg/L
G64S	Compliance	E004	01/25/2024	Chromium, total	0.0028 U	mg/L
G64S	Compliance	E004	01/25/2024	Cobalt, total	0.00048 U	mg/L
G64S	Compliance	E004	01/25/2024	Dissolved Oxygen	0	mg/L
G64S	Compliance	E004	01/25/2024	Fluoride, total	0.280	mg/L
G64S	Compliance	E004	01/25/2024	Lead, total	0.00033	mg/L
G64S	Compliance	E004	01/25/2024	Lithium, total	0.005 U	mg/L
G64S	Compliance	E004	01/25/2024	Mercury, total	0.00014 U	mg/L
G64S	Compliance	E004	01/25/2024	Molybdenum, total	0.00100	mg/L
G64S	Compliance	E004	01/25/2024	Oxidation Reduction Potential	-42.0	mV
G64S	Compliance	E004	01/25/2024	pH (field)	6.8	SU
G64S	Compliance	E004	01/25/2024	Radium 226 + Radium 228, total	1.52	pCi/L
G64S	Compliance	E004	01/25/2024	Selenium, total	0.00074 U	mg/L
G64S	Compliance	E004	01/25/2024	Specific Conductance @ 25C (field)	720	micromhos/cm
G64S	Compliance	E004	01/25/2024	Sulfate, total	22.0	mg/L
G64S	Compliance	E004	01/25/2024	Temperature	11.5	degrees C
G64S	Compliance	E004	01/25/2024	Thallium, total	0.00038 U	mg/L
G64S	Compliance	E004	01/25/2024	Total Dissolved Solids	480	mg/L
G64S	Compliance	E004	01/25/2024	Turbidity, field	19.6	NTU

Notes:
C = Celsius
cm = centimeter
mg/L = milligrams per liter
mV = millivolts
NTU = Nephelometric Turbidity Units
pCi/L = picocuries per liter
R = resample
SU = Standard Units
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J- = The result is an estimated quantity, but the result may be biased low.
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.

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G02S	Background	E005	04/22/2024	Antimony, total	0.00043 U	mg/L
G02S	Background	E005	04/22/2024	Arsenic, total	0.00930	mg/L
G02S	Background	E005	04/22/2024	Barium, total	0.350	mg/L
G02S	Background	E005	04/22/2024	Beryllium, total	0.00059 U	mg/L
G02S	Background	E005	04/22/2024	Boron, total	0.0990	mg/L
G02S	Background	E005	04/22/2024	Cadmium, total	0.00074 U	mg/L
G02S	Background	E005	04/22/2024	Calcium, total	97.0	mg/L
G02S	Background	E005	04/22/2024	Chloride, total	2.40 J+	mg/L
G02S	Background	E005	04/22/2024	Chromium, total	0.0028 U	mg/L
G02S	Background	E005	04/22/2024	Cobalt, total	0.00048 U	mg/L
G02S	Background	E005	04/22/2024	Dissolved Oxygen	0.520	mg/L
G02S	Background	E005	04/22/2024	Fluoride, total	0.295	mg/L
G02S	Background	E005	04/22/2024	Lead, total	0.00051 J	mg/L
G02S	Background	E005	04/22/2024	Lithium, total	0.005 U	mg/L
G02S	Background	E005	04/22/2024	Mercury, total	0.00014 U	mg/L
G02S	Background	E005	04/22/2024	Molybdenum, total	0.00074 U	mg/L
G02S	Background	E005	04/22/2024	Oxidation Reduction Potential	-98.0	mV
G02S	Background	E005	04/22/2024	pH (field)	6.7	SU
G02S	Background	E005	04/22/2024	Radium 226 + Radium 228, total	0.884	pCi/L
G02S	Background	E005	04/22/2024	Selenium, total	0.00074 U	mg/L
G02S	Background	E005	04/22/2024	Specific Conductance @ 25C (field)	683	micromhos/cm
G02S	Background	E005	04/22/2024	Sulfate, total	0.18 U	mg/L
G02S	Background	E005	04/22/2024	Temperature	18.1	degrees C
G02S	Background	E005	04/22/2024	Thallium, total	0.00038 U	mg/L
G02S	Background	E005	04/22/2024	Total Dissolved Solids	400	mg/L
G02S	Background	E005	04/22/2024	Turbidity, field	101	NTU
G50S	Background	E005	04/23/2024	Antimony, total	0.00043 U	mg/L
G50S	Background	E005	04/23/2024	Arsenic, total	0.00069 U	mg/L
G50S	Background	E005	04/23/2024	Barium, total	0.0680	mg/L
G50S	Background	E005	04/23/2024	Beryllium, total	0.00059 U	mg/L
G50S	Background	E005	04/23/2024	Boron, total	0.0150	mg/L
G50S	Background	E005	04/23/2024	Cadmium, total	0.00074 U	mg/L
G50S	Background	E005	04/23/2024	Calcium, total	89.0	mg/L
G50S	Background	E005	04/23/2024	Chloride, total	12.0	mg/L
G50S	Background	E005	04/23/2024	Chromium, total	0.0028 U	mg/L
G50S	Background	E005	04/23/2024	Cobalt, total	0.0011 J	mg/L
G50S	Background	E005	04/23/2024	Dissolved Oxygen	2.90	mg/L
G50S	Background	E005	04/23/2024	Fluoride, total	0.21 J	mg/L
G50S	Background	E005	04/23/2024	Lead, total	0.00023 J	mg/L
G50S	Background	E005	04/23/2024	Lithium, total	0.005 U	mg/L
G50S	Background	E005	04/23/2024	Mercury, total	0.00014 U	mg/L
G50S	Background	E005	04/23/2024	Molybdenum, total	0.00075 J	mg/L
G50S	Background	E005	04/23/2024	Oxidation Reduction Potential	-8.00	mV
G50S	Background	E005	04/23/2024	pH (field)	7.1	SU
G50S	Background	E005	04/23/2024	Radium 226 + Radium 228, total	0.728	pCi/L
G50S	Background	E005	04/23/2024	Selenium, total	0.00074 U	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G50S	Background	E005	04/23/2024	Specific Conductance @ 25C (field)	714	micromhos/cm
G50S	Background	E005	04/23/2024	Sulfate, total	44.0	mg/L
G50S	Background	E005	04/23/2024	Temperature	11.8	degrees C
G50S	Background	E005	04/23/2024	Thallium, total	0.00038 U	mg/L
G50S	Background	E005	04/23/2024	Total Dissolved Solids	340	mg/L
G50S	Background	E005	04/23/2024	Turbidity, field	190	NTU
G51S	Background	E005	04/17/2024	Antimony, total	0.00043 U	mg/L
G51S	Background	E005	04/17/2024	Arsenic, total	0.00730	mg/L
G51S	Background	E005	04/17/2024	Barium, total	0.120	mg/L
G51S	Background	E005	04/17/2024	Beryllium, total	0.00059 U	mg/L
G51S	Background	E005	04/17/2024	Boron, total	0.0130 J+	mg/L
G51S	Background	E005	04/17/2024	Cadmium, total	0.00074 U	mg/L
G51S	Background	E005	04/17/2024	Calcium, total	100	mg/L
G51S	Background	E005	04/17/2024	Chloride, total	13.0	mg/L
G51S	Background	E005	04/17/2024	Chromium, total	0.0035 J	mg/L
G51S	Background	E005	04/17/2024	Cobalt, total	0.0013 J	mg/L
G51S	Background	E005	04/17/2024	Dissolved Oxygen	0	mg/L
G51S	Background	E005	04/17/2024	Fluoride, total	0.236 J	mg/L
G51S	Background	E005	04/17/2024	Lead, total	0.0160	mg/L
G51S	Background	E005	04/17/2024	Lithium, total	0.005 U	mg/L
G51S	Background	E005	04/17/2024	Mercury, total	0.00014 U	mg/L
G51S	Background	E005	04/17/2024	Molybdenum, total	0.00110	mg/L
G51S	Background	E005	04/17/2024	Oxidation Reduction Potential	-89.0	mV
G51S	Background	E005	04/17/2024	pH (field)	6.9	SU
G51S	Background	E005	04/17/2024	Radium 226 + Radium 228, total	1.76	pCi/L
G51S	Background	E005	04/17/2024	Selenium, total	0.00074 U	mg/L
G51S	Background	E005	04/17/2024	Specific Conductance @ 25C (field)	753	micromhos/cm
G51S	Background	E005	04/17/2024	Sulfate, total	59.0	mg/L
G51S	Background	E005	04/17/2024	Temperature	13.9	degrees C
G51S	Background	E005	04/17/2024	Thallium, total	0.00038 U	mg/L
G51S	Background	E005	04/17/2024	Total Dissolved Solids	440	mg/L
G51S	Background	E005	04/17/2024	Turbidity, field	242	NTU
G54L	Compliance	E005	04/23/2024	Antimony, total	0.00043 U	mg/L
G54L	Compliance	E005	04/30/2024	Antimony, total	--	mg/L
G54L	Compliance	E005	04/23/2024	Arsenic, total	0.00160	mg/L
G54L	Compliance	E005	04/30/2024	Arsenic, total	--	mg/L
G54L	Compliance	E005	04/23/2024	Barium, total	0.230	mg/L
G54L	Compliance	E005	04/30/2024	Barium, total	--	mg/L
G54L	Compliance	E005	04/23/2024	Beryllium, total	0.00059 U	mg/L
G54L	Compliance	E005	04/30/2024	Beryllium, total	--	mg/L
G54L	Compliance	E005	04/23/2024	Boron, total	0.0096 J	mg/L
G54L	Compliance	E005	04/30/2024	Boron, total	--	mg/L
G54L	Compliance	E005	04/23/2024	Cadmium, total	0.00074 U	mg/L
G54L	Compliance	E005	04/30/2024	Cadmium, total	--	mg/L
G54L	Compliance	E005	04/23/2024	Calcium, total	200	mg/L
G54L	Compliance	E005	04/30/2024	Calcium, total	--	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G54L	Compliance	E005	04/23/2024	Chloride, total	47.0	mg/L
G54L	Compliance	E005	04/30/2024	Chloride, total	--	mg/L
G54L	Compliance	E005	04/23/2024	Chromium, total	0.0028 U	mg/L
G54L	Compliance	E005	04/30/2024	Chromium, total	--	mg/L
G54L	Compliance	E005	04/23/2024	Cobalt, total	0.001 J	mg/L
G54L	Compliance	E005	04/30/2024	Cobalt, total	--	mg/L
G54L	Compliance	E005	04/23/2024	Dissolved Oxygen	0	mg/L
G54L	Compliance	E005	04/30/2024	Dissolved Oxygen	--	mg/L
G54L	Compliance	E005	04/23/2024	Fluoride, total	0.186 J	mg/L
G54L	Compliance	E005	04/30/2024	Fluoride, total	--	mg/L
G54L	Compliance	E005	04/23/2024	Lead, total	0.00022 U	mg/L
G54L	Compliance	E005	04/30/2024	Lead, total	--	mg/L
G54L	Compliance	E005	04/23/2024	Lithium, total	0.005 U	mg/L
G54L	Compliance	E005	04/30/2024	Lithium, total	--	mg/L
G54L	Compliance	E005	04/23/2024	Mercury, total	0.00014 U	mg/L
G54L	Compliance	E005	04/30/2024	Mercury, total	--	mg/L
G54L	Compliance	E005	04/23/2024	Molybdenum, total	0.00530	mg/L
G54L	Compliance	E005	04/30/2024	Molybdenum, total	--	mg/L
G54L	Compliance	E005	04/23/2024	Oxidation Reduction Potential	-51.0	mV
G54L	Compliance	E005	04/30/2024	Oxidation Reduction Potential	--	mV
G54L	Compliance	E005	04/23/2024	pH (field)	6.1	SU
G54L	Compliance	E005	04/30/2024	pH (field)	--	SU
G54L	Compliance	E005	04/23/2024	Radium 226 + Radium 228, total	0.317	pCi/L
G54L	Compliance	E005	04/30/2024	Radium 226 + Radium 228, total	--	pCi/L
G54L	Compliance	E005	04/23/2024	Selenium, total	0.00074 U	mg/L
G54L	Compliance	E005	04/30/2024	Selenium, total	--	mg/L
G54L	Compliance	E005	04/23/2024	Specific Conductance @ 25C (field)	1,630	micromhos/cm
G54L	Compliance	E005	04/30/2024	Specific Conductance @ 25C (field)	--	micromhos/cm
G54L	Compliance	E005	04/23/2024	Sulfate, total	120	mg/L
G54L	Compliance	E005	04/30/2024	Sulfate, total	--	mg/L
G54L	Compliance	E005	04/23/2024	Temperature	12.2	degrees C
G54L	Compliance	E005	04/30/2024	Temperature	--	degrees C
G54L	Compliance	E005	04/23/2024	Thallium, total	0.00038 U	mg/L
G54L	Compliance	E005	04/30/2024	Thallium, total	--	mg/L
G54L	Compliance	E005	04/23/2024	Total Dissolved Solids	--	mg/L
G54L	Compliance	E005	04/30/2024	Total Dissolved Solids	1,000	mg/L
G54L	Compliance	E005	04/23/2024	Turbidity, field	0	NTU
G54L	Compliance	E005	04/30/2024	Turbidity, field	--	NTU
G54S	Compliance	E005	04/24/2024	Antimony, total	0.00043 U	mg/L
G54S	Compliance	E005	04/24/2024	Arsenic, total	0.00250	mg/L
G54S	Compliance	E005	04/24/2024	Barium, total	0.220	mg/L
G54S	Compliance	E005	04/24/2024	Beryllium, total	0.00059 U	mg/L
G54S	Compliance	E005	04/24/2024	Boron, total	0.0370	mg/L
G54S	Compliance	E005	04/24/2024	Cadmium, total	0.00074 U	mg/L
G54S	Compliance	E005	04/24/2024	Calcium, total	130	mg/L
G54S	Compliance	E005	04/24/2024	Chloride, total	5.80	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G54S	Compliance	E005	04/24/2024	Chromium, total	0.0028 U	mg/L
G54S	Compliance	E005	04/24/2024	Cobalt, total	0.00048 U	mg/L
G54S	Compliance	E005	04/24/2024	Dissolved Oxygen	9.50	mg/L
G54S	Compliance	E005	04/24/2024	Fluoride, total	0.205 J	mg/L
G54S	Compliance	E005	04/24/2024	Lead, total	0.00022 U	mg/L
G54S	Compliance	E005	04/24/2024	Lithium, total	0.0064 J	mg/L
G54S	Compliance	E005	04/24/2024	Mercury, total	0.00014 U	mg/L
G54S	Compliance	E005	04/24/2024	Molybdenum, total	0.00110	mg/L
G54S	Compliance	E005	04/24/2024	Oxidation Reduction Potential	-64.0	mV
G54S	Compliance	E005	04/24/2024	pH (field)	6.7	SU
G54S	Compliance	E005	04/24/2024	Radium 226 + Radium 228, total	0.0724	pCi/L
G54S	Compliance	E005	04/24/2024	Selenium, total	0.00074 U	mg/L
G54S	Compliance	E005	04/24/2024	Specific Conductance @ 25C (field)	1,040	micromhos/cm
G54S	Compliance	E005	04/24/2024	Sulfate, total	36.0	mg/L
G54S	Compliance	E005	04/24/2024	Temperature	13.7	degrees C
G54S	Compliance	E005	04/24/2024	Thallium, total	0.00038 U	mg/L
G54S	Compliance	E005	04/24/2024	Total Dissolved Solids	500	mg/L
G54S	Compliance	E005	04/24/2024	Turbidity, field	12.8	NTU
G57S	Compliance	E005	04/24/2024	Antimony, total	0.00043 U	mg/L
G57S	Compliance	E005	04/24/2024	Arsenic, total	0.00069 U	mg/L
G57S	Compliance	E005	04/24/2024	Barium, total	0.200	mg/L
G57S	Compliance	E005	04/24/2024	Beryllium, total	0.00059 U	mg/L
G57S	Compliance	E005	04/24/2024	Boron, total	0.0130	mg/L
G57S	Compliance	E005	04/24/2024	Cadmium, total	0.00074 U	mg/L
G57S	Compliance	E005	04/24/2024	Calcium, total	170	mg/L
G57S	Compliance	E005	04/24/2024	Chloride, total	16.0	mg/L
G57S	Compliance	E005	04/24/2024	Chromium, total	0.0028 U	mg/L
G57S	Compliance	E005	04/24/2024	Cobalt, total	0.00048 U	mg/L
G57S	Compliance	E005	04/24/2024	Dissolved Oxygen	3.00	mg/L
G57S	Compliance	E005	04/24/2024	Fluoride, total	0.249 J	mg/L
G57S	Compliance	E005	04/24/2024	Lead, total	0.00038 J	mg/L
G57S	Compliance	E005	04/24/2024	Lithium, total	0.005 U	mg/L
G57S	Compliance	E005	04/24/2024	Mercury, total	0.00014 U	mg/L
G57S	Compliance	E005	04/24/2024	Molybdenum, total	0.00074 U	mg/L
G57S	Compliance	E005	04/24/2024	Oxidation Reduction Potential	78.0	mV
G57S	Compliance	E005	04/24/2024	pH (field)	6.7	SU
G57S	Compliance	E005	04/24/2024	Radium 226 + Radium 228, total	0.192	pCi/L
G57S	Compliance	E005	04/24/2024	Selenium, total	0.00074 U	mg/L
G57S	Compliance	E005	04/24/2024	Specific Conductance @ 25C (field)	1,360	micromhos/cm
G57S	Compliance	E005	04/24/2024	Sulfate, total	49.0	mg/L
G57S	Compliance	E005	04/24/2024	Temperature	14.2	degrees C
G57S	Compliance	E005	04/24/2024	Thallium, total	0.00038 U	mg/L
G57S	Compliance	E005	04/24/2024	Total Dissolved Solids	800	mg/L
G57S	Compliance	E005	04/24/2024	Turbidity, field	16.3	NTU
G60L	Compliance	E005	04/24/2024	Antimony, total	0.00052 J	mg/L
G60L	Compliance	E005	04/24/2024	Arsenic, total	0.00160	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G60L	Compliance	E005	04/24/2024	Barium, total	0.0940	mg/L
G60L	Compliance	E005	04/24/2024	Beryllium, total	0.00059 U	mg/L
G60L	Compliance	E005	04/24/2024	Boron, total	0.0230	mg/L
G60L	Compliance	E005	04/24/2024	Cadmium, total	0.00130	mg/L
G60L	Compliance	E005	04/24/2024	Calcium, total	97.0	mg/L
G60L	Compliance	E005	04/24/2024	Chloride, total	9.10	mg/L
G60L	Compliance	E005	04/24/2024	Chromium, total	0.00450	mg/L
G60L	Compliance	E005	04/24/2024	Cobalt, total	0.0380	mg/L
G60L	Compliance	E005	04/24/2024	Dissolved Oxygen	0.900	mg/L
G60L	Compliance	E005	04/24/2024	Fluoride, total	0.11 J	mg/L
G60L	Compliance	E005	04/24/2024	Lead, total	0.00390	mg/L
G60L	Compliance	E005	04/24/2024	Lithium, total	0.005 U	mg/L
G60L	Compliance	E005	04/24/2024	Mercury, total	0.00014 U	mg/L
G60L	Compliance	E005	04/24/2024	Molybdenum, total	0.00074 U	mg/L
G60L	Compliance	E005	04/24/2024	Oxidation Reduction Potential	38.4	mV
G60L	Compliance	E005	04/24/2024	pH (field)	6.2	SU
G60L	Compliance	E005	04/24/2024	Radium 226 + Radium 228, total	0.196	pCi/L
G60L	Compliance	E005	04/24/2024	Selenium, total	0.00074 U	mg/L
G60L	Compliance	E005	04/24/2024	Specific Conductance @ 25C (field)	819	micromhos/cm
G60L	Compliance	E005	04/24/2024	Sulfate, total	180	mg/L
G60L	Compliance	E005	04/24/2024	Temperature	16.4	degrees C
G60L	Compliance	E005	04/24/2024	Thallium, total	0.00038 U	mg/L
G60L	Compliance	E005	04/24/2024	Total Dissolved Solids	500	mg/L
G60L	Compliance	E005	04/24/2024	Turbidity, field	215	NTU
G60S	Compliance	E005	04/24/2024	Antimony, total	0.00043 U	mg/L
G60S	Compliance	E005	04/24/2024	Arsenic, total	0.0130	mg/L
G60S	Compliance	E005	04/24/2024	Barium, total	0.240	mg/L
G60S	Compliance	E005	04/24/2024	Beryllium, total	0.00059 J	mg/L
G60S	Compliance	E005	04/24/2024	Boron, total	0.0250	mg/L
G60S	Compliance	E005	04/24/2024	Cadmium, total	0.00074 U	mg/L
G60S	Compliance	E005	04/24/2024	Calcium, total	200	mg/L
G60S	Compliance	E005	04/24/2024	Chloride, total	5.60	mg/L
G60S	Compliance	E005	04/24/2024	Chromium, total	0.0230	mg/L
G60S	Compliance	E005	04/24/2024	Cobalt, total	0.00960	mg/L
G60S	Compliance	E005	04/24/2024	Dissolved Oxygen	0.800	mg/L
G60S	Compliance	E005	04/24/2024	Fluoride, total	0.197 J	mg/L
G60S	Compliance	E005	04/24/2024	Lead, total	0.0260	mg/L
G60S	Compliance	E005	04/24/2024	Lithium, total	0.0220	mg/L
G60S	Compliance	E005	04/24/2024	Mercury, total	0.00014 U	mg/L
G60S	Compliance	E005	04/24/2024	Molybdenum, total	0.00260	mg/L
G60S	Compliance	E005	04/24/2024	Oxidation Reduction Potential	-40.9	mV
G60S	Compliance	E005	04/24/2024	pH (field)	6.7	SU
G60S	Compliance	E005	04/24/2024	Radium 226 + Radium 228, total	0.574	pCi/L
G60S	Compliance	E005	04/24/2024	Selenium, total	0.00092 J	mg/L
G60S	Compliance	E005	04/24/2024	Specific Conductance @ 25C (field)	1,021	micromhos/cm
G60S	Compliance	E005	04/24/2024	Sulfate, total	79.0	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
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DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G60S	Compliance	E005	04/24/2024	Temperature	17.6	degrees C
G60S	Compliance	E005	04/24/2024	Thallium, total	0.00038 U	mg/L
G60S	Compliance	E005	04/24/2024	Total Dissolved Solids	560	mg/L
G60S	Compliance	E005	04/24/2024	Turbidity, field	1,250	NTU
G64L	Compliance	E005	04/22/2024	Antimony, total	0.00043 U	mg/L
G64L	Compliance	E005	04/22/2024	Arsenic, total	0.00069 U	mg/L
G64L	Compliance	E005	04/22/2024	Barium, total	0.110	mg/L
G64L	Compliance	E005	04/22/2024	Beryllium, total	0.00059 U	mg/L
G64L	Compliance	E005	04/22/2024	Boron, total	0.0210	mg/L
G64L	Compliance	E005	04/22/2024	Cadmium, total	0.00074 U	mg/L
G64L	Compliance	E005	04/22/2024	Calcium, total	130	mg/L
G64L	Compliance	E005	04/22/2024	Chloride, total	2.30	mg/L
G64L	Compliance	E005	04/22/2024	Chromium, total	0.0028 U	mg/L
G64L	Compliance	E005	04/22/2024	Cobalt, total	0.00048 U	mg/L
G64L	Compliance	E005	04/22/2024	Dissolved Oxygen	3.80	mg/L
G64L	Compliance	E005	04/22/2024	Fluoride, total	0.286	mg/L
G64L	Compliance	E005	04/22/2024	Lead, total	0.00022 U	mg/L
G64L	Compliance	E005	04/22/2024	Lithium, total	0.0052 J	mg/L
G64L	Compliance	E005	04/22/2024	Mercury, total	0.00014 U	mg/L
G64L	Compliance	E005	04/22/2024	Molybdenum, total	0.00150	mg/L
G64L	Compliance	E005	04/22/2024	Oxidation Reduction Potential	117	mV
G64L	Compliance	E005	04/22/2024	pH (field)	6.8	SU
G64L	Compliance	E005	04/22/2024	Radium 226 + Radium 228, total	1.36	pCi/L
G64L	Compliance	E005	04/22/2024	Selenium, total	0.00074 U	mg/L
G64L	Compliance	E005	04/22/2024	Specific Conductance @ 25C (field)	1,120	micromhos/cm
G64L	Compliance	E005	04/22/2024	Sulfate, total	120	mg/L
G64L	Compliance	E005	04/22/2024	Temperature	16.4	degrees C
G64L	Compliance	E005	04/22/2024	Thallium, total	0.00038 U	mg/L
G64L	Compliance	E005	04/22/2024	Total Dissolved Solids	690	mg/L
G64L	Compliance	E005	04/22/2024	Turbidity, field	0	NTU
G64S	Compliance	E005	04/24/2024	Antimony, total	0.00043 U	mg/L
G64S	Compliance	E005	04/24/2024	Arsenic, total	0.00097 J	mg/L
G64S	Compliance	E005	04/24/2024	Barium, total	0.170	mg/L
G64S	Compliance	E005	04/24/2024	Beryllium, total	0.00059 U	mg/L
G64S	Compliance	E005	04/24/2024	Boron, total	0.0180	mg/L
G64S	Compliance	E005	04/24/2024	Cadmium, total	0.00074 U	mg/L
G64S	Compliance	E005	04/24/2024	Calcium, total	98.0	mg/L
G64S	Compliance	E005	04/24/2024	Chloride, total	2.50	mg/L
G64S	Compliance	E005	04/24/2024	Chromium, total	0.0028 U	mg/L
G64S	Compliance	E005	04/24/2024	Cobalt, total	0.00048 U	mg/L
G64S	Compliance	E005	04/24/2024	Dissolved Oxygen	1.30	mg/L
G64S	Compliance	E005	04/24/2024	Fluoride, total	0.242 J	mg/L
G64S	Compliance	E005	04/24/2024	Lead, total	0.00023 J	mg/L
G64S	Compliance	E005	04/24/2024	Lithium, total	0.005 U	mg/L
G64S	Compliance	E005	04/24/2024	Mercury, total	0.00014 U	mg/L
G64S	Compliance	E005	04/24/2024	Molybdenum, total	0.00140	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
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DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G64S	Compliance	E005	04/24/2024	Oxidation Reduction Potential	193	mV
G64S	Compliance	E005	04/24/2024	pH (field)	6.7	SU
G64S	Compliance	E005	04/24/2024	Radium 226 + Radium 228, total	0.209	pCi/L
G64S	Compliance	E005	04/24/2024	Selenium, total	0.00074 U	mg/L
G64S	Compliance	E005	04/24/2024	Specific Conductance @ 25C (field)	904	micromhos/cm
G64S	Compliance	E005	04/24/2024	Sulfate, total	21.0	mg/L
G64S	Compliance	E005	04/24/2024	Temperature	13.4	degrees C
G64S	Compliance	E005	04/24/2024	Thallium, total	0.00038 U	mg/L
G64S	Compliance	E005	04/24/2024	Total Dissolved Solids	420	mg/L
G64S	Compliance	E005	04/24/2024	Turbidity, field	137	NTU

Notes:
− = no data available
C = Celsius
cm = centimeter
mg/L = milligrams per liter
mV = millivolts
NTU = Nephelometric Turbidity Units
pCi/L = picocuries per liter
SU = Standard Units
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.

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G02S	Background	E006	08/01/2024	Antimony, total	0.00043 U	mg/L
G02S	Background	E006	08/01/2024	Arsenic, total	0.00680	mg/L
G02S	Background	E006	08/01/2024	Barium, total	0.230	mg/L
G02S	Background	E006	08/01/2024	Beryllium, total	0.00059 U	mg/L
G02S	Background	E006	08/01/2024	Boron, total	0.0560	mg/L
G02S	Background	E006	08/01/2024	Cadmium, total	0.00074 U	mg/L
G02S	Background	E006	08/01/2024	Calcium, total	99.0	mg/L
G02S	Background	E006	08/01/2024	Chloride, total	1.30	mg/L
G02S	Background	E006	08/01/2024	Chromium, total	0.0028 U	mg/L
G02S	Background	E006	08/01/2024	Cobalt, total	0.00048 U	mg/L
G02S	Background	E006	08/01/2024	Dissolved Oxygen	1.40	mg/L
G02S	Background	E006	08/01/2024	Fluoride, total	0.263	mg/L
G02S	Background	E006	08/01/2024	Lead, total	0.00022 U	mg/L
G02S	Background	E006	08/01/2024	Lithium, total	0.005 U	mg/L
G02S	Background	E006	08/01/2024	Mercury, total	0.00014 U	mg/L
G02S	Background	E006	08/01/2024	Molybdenum, total	0.0110	mg/L
G02S	Background	E006	08/01/2024	Oxidation Reduction Potential	-89.0	mV
G02S	Background	E006	08/01/2024	pH (field)	6.6	SU
G02S	Background	E006	08/01/2024	Radium 226 + Radium 228, total	0.41	pCi/L
G02S	Background	E006	08/01/2024	Selenium, total	0.00074 U	mg/L
G02S	Background	E006	08/01/2024	Specific Conductance @ 25C (field)	818	micromhos/cm
G02S	Background	E006	08/01/2024	Sulfate, total	0.33 J	mg/L
G02S	Background	E006	08/01/2024	Temperature	17.3	degrees C
G02S	Background	E006	08/01/2024	Thallium, total	0.00038 U	mg/L
G02S	Background	E006	08/01/2024	Total Dissolved Solids	430	mg/L
G02S	Background	E006	08/01/2024	Turbidity, field	18.3	NTU
G50S	Background	E006	07/29/2024	Antimony, total	0.00043 U	mg/L
G50S	Background	E006	07/29/2024	Arsenic, total	0.00069 U	mg/L
G50S	Background	E006	07/29/2024	Barium, total	0.0610	mg/L
G50S	Background	E006	07/29/2024	Beryllium, total	0.00059 U	mg/L
G50S	Background	E006	07/29/2024	Boron, total	0.0140	mg/L
G50S	Background	E006	07/29/2024	Cadmium, total	0.00074 U	mg/L
G50S	Background	E006	07/29/2024	Calcium, total	84.0	mg/L
G50S	Background	E006	07/29/2024	Chloride, total	13.0	mg/L
G50S	Background	E006	07/29/2024	Chromium, total	0.0028 U	mg/L
G50S	Background	E006	07/29/2024	Cobalt, total	0.00048 U	mg/L
G50S	Background	E006	07/29/2024	Dissolved Oxygen	0.0300	mg/L
G50S	Background	E006	07/29/2024	Fluoride, total	0.261	mg/L
G50S	Background	E006	07/29/2024	Lead, total	0.00022 U	mg/L
G50S	Background	E006	07/29/2024	Lithium, total	0.005 U	mg/L
G50S	Background	E006	07/29/2024	Mercury, total	0.00014 U	mg/L
G50S	Background	E006	07/29/2024	Molybdenum, total	0.00074 U	mg/L
G50S	Background	E006	07/29/2024	Oxidation Reduction Potential	-64.0	mV
G50S	Background	E006	07/29/2024	pH (field)	7.1	SU
G50S	Background	E006	07/29/2024	Radium 226 + Radium 228, total	0.388	pCi/L
G50S	Background	E006	07/29/2024	Selenium, total	0.00074 U	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2024
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CANTON, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G50S	Background	E006	07/29/2024	Specific Conductance @ 25C (field)	539	micromhos/cm
G50S	Background	E006	07/29/2024	Sulfate, total	45.0	mg/L
G50S	Background	E006	07/29/2024	Temperature	20.0	degrees C
G50S	Background	E006	07/29/2024	Thallium, total	0.00038 U	mg/L
G50S	Background	E006	07/29/2024	Total Dissolved Solids	360	mg/L
G50S	Background	E006	07/29/2024	Turbidity, field	17.8	NTU
G51S	Background	E006	07/29/2024	Antimony, total	0.00043 U	mg/L
G51S	Background	E006	07/29/2024	Arsenic, total	0.00330	mg/L
G51S	Background	E006	07/29/2024	Barium, total	0.120	mg/L
G51S	Background	E006	07/29/2024	Beryllium, total	0.00059 U	mg/L
G51S	Background	E006	07/29/2024	Boron, total	0.0092 J	mg/L
G51S	Background	E006	07/29/2024	Cadmium, total	0.00074 U	mg/L
G51S	Background	E006	07/29/2024	Calcium, total	96.0	mg/L
G51S	Background	E006	07/29/2024	Chloride, total	16.0	mg/L
G51S	Background	E006	07/29/2024	Chromium, total	0.0028 U	mg/L
G51S	Background	E006	07/29/2024	Cobalt, total	0.00053 J	mg/L
G51S	Background	E006	07/29/2024	Dissolved Oxygen	5.80	mg/L
G51S	Background	E006	07/29/2024	Fluoride, total	0.223 J	mg/L
G51S	Background	E006	07/29/2024	Lead, total	0.00910	mg/L
G51S	Background	E006	07/29/2024	Lithium, total	0.005 U	mg/L
G51S	Background	E006	07/29/2024	Mercury, total	0.00014 U	mg/L
G51S	Background	E006	07/29/2024	Molybdenum, total	0.00120	mg/L
G51S	Background	E006	07/29/2024	Oxidation Reduction Potential	-108	mV
G51S	Background	E006	07/29/2024	pH (field)	7.0	SU
G51S	Background	E006	07/29/2024	Radium 226 + Radium 228, total	0.35	pCi/L
G51S	Background	E006	07/29/2024	Selenium, total	0.00074 U	mg/L
G51S	Background	E006	07/29/2024	Specific Conductance @ 25C (field)	777	micromhos/cm
G51S	Background	E006	07/29/2024	Sulfate, total	60.0	mg/L
G51S	Background	E006	07/29/2024	Temperature	16.0	degrees C
G51S	Background	E006	07/29/2024	Thallium, total	0.00038 U	mg/L
G51S	Background	E006	07/29/2024	Total Dissolved Solids	350 J	mg/L
G51S	Background	E006	07/29/2024	Turbidity, field	167	NTU
G54L	Compliance	E006	07/29/2024	Antimony, total	0.00043 U	mg/L
G54L	Compliance	E006	07/29/2024	Arsenic, total	0.00160	mg/L
G54L	Compliance	E006	07/29/2024	Barium, total	0.220	mg/L
G54L	Compliance	E006	07/29/2024	Beryllium, total	0.00059 U	mg/L
G54L	Compliance	E006	07/29/2024	Boron, total	0.0092 J	mg/L
G54L	Compliance	E006	07/29/2024	Cadmium, total	0.00074 U	mg/L
G54L	Compliance	E006	07/29/2024	Calcium, total	200	mg/L
G54L	Compliance	E006	07/29/2024	Chloride, total	66.0	mg/L
G54L	Compliance	E006	07/29/2024	Chromium, total	0.0028 U	mg/L
G54L	Compliance	E006	07/29/2024	Cobalt, total	0.0011 J	mg/L
G54L	Compliance	E006	07/29/2024	Dissolved Oxygen	0.780	mg/L
G54L	Compliance	E006	07/29/2024	Fluoride, total	0.203 J	mg/L
G54L	Compliance	E006	07/29/2024	Lead, total	0.00022 U	mg/L
G54L	Compliance	E006	07/29/2024	Lithium, total	0.005 U	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2024
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CANTON, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G54L	Compliance	E006	07/29/2024	Mercury, total	0.00014 U	mg/L
G54L	Compliance	E006	07/29/2024	Molybdenum, total	0.00074 U	mg/L
G54L	Compliance	E006	07/29/2024	Oxidation Reduction Potential	-96.0	mV
G54L	Compliance	E006	07/29/2024	pH (field)	6.6	SU
G54L	Compliance	E006	07/29/2024	Radium 226 + Radium 228, total	0.386	pCi/L
G54L	Compliance	E006	07/29/2024	Selenium, total	0.00074 U	mg/L
G54L	Compliance	E006	07/29/2024	Specific Conductance @ 25C (field)	1,780	micromhos/cm
G54L	Compliance	E006	07/29/2024	Sulfate, total	120	mg/L
G54L	Compliance	E006	07/29/2024	Temperature	19.2	degrees C
G54L	Compliance	E006	07/29/2024	Thallium, total	0.00038 U	mg/L
G54L	Compliance	E006	07/29/2024	Total Dissolved Solids	940	mg/L
G54L	Compliance	E006	07/29/2024	Turbidity, field	7.00	NTU
G54S	Compliance	E006	07/29/2024	Antimony, total	0.00043 U	mg/L
G54S	Compliance	E006	07/29/2024	Arsenic, total	0.00210	mg/L
G54S	Compliance	E006	07/29/2024	Barium, total	0.240	mg/L
G54S	Compliance	E006	07/29/2024	Beryllium, total	0.00059 U	mg/L
G54S	Compliance	E006	07/29/2024	Boron, total	0.0140	mg/L
G54S	Compliance	E006	07/29/2024	Cadmium, total	0.00074 U	mg/L
G54S	Compliance	E006	07/29/2024	Calcium, total	180	mg/L
G54S	Compliance	E006	07/29/2024	Chloride, total	7.50	mg/L
G54S	Compliance	E006	07/29/2024	Chromium, total	0.0028 U	mg/L
G54S	Compliance	E006	07/29/2024	Cobalt, total	0.0005 J	mg/L
G54S	Compliance	E006	07/29/2024	Dissolved Oxygen	1.00	mg/L
G54S	Compliance	E006	07/29/2024	Fluoride, total	0.197 J	mg/L
G54S	Compliance	E006	07/29/2024	Lead, total	0.00340	mg/L
G54S	Compliance	E006	07/29/2024	Lithium, total	0.005 U	mg/L
G54S	Compliance	E006	07/29/2024	Mercury, total	0.00014 U	mg/L
G54S	Compliance	E006	07/29/2024	Molybdenum, total	0.00079 J	mg/L
G54S	Compliance	E006	07/29/2024	Oxidation Reduction Potential	-137	mV
G54S	Compliance	E006	07/29/2024	pH (field)	6.8	SU
G54S	Compliance	E006	07/29/2024	Radium 226 + Radium 228, total	1.49	pCi/L
G54S	Compliance	E006	07/29/2024	Selenium, total	0.00074 U	mg/L
G54S	Compliance	E006	07/29/2024	Specific Conductance @ 25C (field)	1,020	micromhos/cm
G54S	Compliance	E006	07/29/2024	Sulfate, total	32.0	mg/L
G54S	Compliance	E006	07/29/2024	Temperature	17.4	degrees C
G54S	Compliance	E006	07/29/2024	Thallium, total	0.00038 U	mg/L
G54S	Compliance	E006	07/29/2024	Total Dissolved Solids	490	mg/L
G54S	Compliance	E006	07/29/2024	Turbidity, field	32.1	NTU
G57S	Compliance	E006	07/23/2024	Antimony, total	0.00043 U	mg/L
G57S	Compliance	E006	07/23/2024	Arsenic, total	0.00069 U	mg/L
G57S	Compliance	E006	07/23/2024	Barium, total	0.190	mg/L
G57S	Compliance	E006	07/23/2024	Beryllium, total	0.00059 U	mg/L
G57S	Compliance	E006	07/23/2024	Boron, total	0.0071 U	mg/L
G57S	Compliance	E006	07/23/2024	Cadmium, total	0.00074 U	mg/L
G57S	Compliance	E006	07/23/2024	Calcium, total	170	mg/L
G57S	Compliance	E006	07/23/2024	Chloride, total	18.0	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G57S	Compliance	E006	07/23/2024	Chromium, total	0.0028 U	mg/L
G57S	Compliance	E006	07/23/2024	Cobalt, total	0.00069 J	mg/L
G57S	Compliance	E006	07/23/2024	Dissolved Oxygen	18.0	mg/L
G57S	Compliance	E006	07/23/2024	Fluoride, total	0.25 UJ	mg/L
G57S	Compliance	E006	07/23/2024	Lead, total	0.00027 J	mg/L
G57S	Compliance	E006	07/23/2024	Lithium, total	0.005 U	mg/L
G57S	Compliance	E006	07/23/2024	Mercury, total	0.00014 U	mg/L
G57S	Compliance	E006	07/23/2024	Molybdenum, total	0.00074 U	mg/L
G57S	Compliance	E006	07/23/2024	Oxidation Reduction Potential	-11.0	mV
G57S	Compliance	E006	07/23/2024	pH (field)	6.6	SU
G57S	Compliance	E006	07/23/2024	Radium 226 + Radium 228, total	0.156	pCi/L
G57S	Compliance	E006	07/23/2024	Selenium, total	0.00074 U	mg/L
G57S	Compliance	E006	07/23/2024	Specific Conductance @ 25C (field)	1,037	micromhos/cm
G57S	Compliance	E006	07/23/2024	Sulfate, total	48.0	mg/L
G57S	Compliance	E006	07/23/2024	Temperature	16.3	degrees C
G57S	Compliance	E006	07/23/2024	Thallium, total	0.00038 U	mg/L
G57S	Compliance	E006	07/23/2024	Total Dissolved Solids	840	mg/L
G57S	Compliance	E006	07/23/2024	Turbidity, field	43.6	NTU
G60L	Compliance	E006	07/31/2024	Antimony, total	0.00043 U	mg/L
G60L	Compliance	E006	07/31/2024	Arsenic, total	0.00091 J	mg/L
G60L	Compliance	E006	07/31/2024	Barium, total	0.0780	mg/L
G60L	Compliance	E006	07/31/2024	Beryllium, total	0.00059 U	mg/L
G60L	Compliance	E006	07/31/2024	Boron, total	0.0330	mg/L
G60L	Compliance	E006	07/31/2024	Cadmium, total	0.00082 J	mg/L
G60L	Compliance	E006	07/31/2024	Calcium, total	100	mg/L
G60L	Compliance	E006	07/31/2024	Chloride, total	7.30	mg/L
G60L	Compliance	E006	07/31/2024	Chromium, total	0.00410	mg/L
G60L	Compliance	E006	07/31/2024	Cobalt, total	0.0280	mg/L
G60L	Compliance	E006R	09/12/2024	Cobalt, total	0.00480	mg/L
G60L	Compliance	E006	07/31/2024	Dissolved Oxygen	2.30	mg/L
G60L	Compliance	E006R	09/12/2024	Dissolved Oxygen	0.690	mg/L
G60L	Compliance	E006	07/31/2024	Fluoride, total	0.0599 J	mg/L
G60L	Compliance	E006	07/31/2024	Lead, total	0.00150	mg/L
G60L	Compliance	E006	07/31/2024	Lithium, total	0.005 U	mg/L
G60L	Compliance	E006	07/31/2024	Mercury, total	0.00014 J	mg/L
G60L	Compliance	E006	07/31/2024	Molybdenum, total	0.00093 J	mg/L
G60L	Compliance	E006	07/31/2024	Oxidation Reduction Potential	206	mV
G60L	Compliance	E006R	09/12/2024	Oxidation Reduction Potential	257	mV
G60L	Compliance	E006	07/31/2024	pH (field)	6.1	SU
G60L	Compliance	E006R	09/12/2024	pH (field)	6.1	SU
G60L	Compliance	E006	07/31/2024	Radium 226 + Radium 228, total	1.43	pCi/L
G60L	Compliance	E006	07/31/2024	Selenium, total	0.00074 U	mg/L
G60L	Compliance	E006	07/31/2024	Specific Conductance @ 25C (field)	886	micromhos/cm
G60L	Compliance	E006R	09/12/2024	Specific Conductance @ 25C (field)	864	micromhos/cm
G60L	Compliance	E006	07/31/2024	Sulfate, total	150	mg/L
G60L	Compliance	E006	07/31/2024	Temperature	20.0	degrees C

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2024
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G60L	Compliance	E006R	09/12/2024	Temperature	17.5	degrees C
G60L	Compliance	E006	07/31/2024	Thallium, total	0.00038 U	mg/L
G60L	Compliance	E006	07/31/2024	Total Dissolved Solids	560	mg/L
G60L	Compliance	E006	07/31/2024	Turbidity, field	183	NTU
G60L	Compliance	E006R	09/12/2024	Turbidity, field	11.5	NTU
G60S	Compliance	E006	07/23/2024	Antimony, total	0.00043 U	mg/L
G60S	Compliance	E006	07/23/2024	Arsenic, total	0.00120	mg/L
G60S	Compliance	E006	07/23/2024	Barium, total	0.150	mg/L
G60S	Compliance	E006	07/23/2024	Beryllium, total	0.00059 U	mg/L
G60S	Compliance	E006	07/23/2024	Boron, total	0.0140	mg/L
G60S	Compliance	E006	07/23/2024	Cadmium, total	0.00074 U	mg/L
G60S	Compliance	E006	07/23/2024	Calcium, total	130	mg/L
G60S	Compliance	E006	07/23/2024	Chloride, total	4.50	mg/L
G60S	Compliance	E006	07/23/2024	Chromium, total	0.0028 U	mg/L
G60S	Compliance	E006	07/23/2024	Cobalt, total	0.00048 U	mg/L
G60S	Compliance	E006	07/23/2024	Dissolved Oxygen	4.40	mg/L
G60S	Compliance	E006	07/23/2024	Fluoride, total	0.25 UJ	mg/L
G60S	Compliance	E006	07/23/2024	Lead, total	0.00088 J	mg/L
G60S	Compliance	E006	07/23/2024	Lithium, total	0.005 U	mg/L
G60S	Compliance	E006	07/23/2024	Mercury, total	0.00014 U	mg/L
G60S	Compliance	E006	07/23/2024	Molybdenum, total	0.00110	mg/L
G60S	Compliance	E006	07/23/2024	Oxidation Reduction Potential	-54.0	mV
G60S	Compliance	E006	07/23/2024	pH (field)	6.7	SU
G60S	Compliance	E006	07/23/2024	Radium 226 + Radium 228, total	1.48	pCi/L
G60S	Compliance	E006	07/23/2024	Selenium, total	0.00074 U	mg/L
G60S	Compliance	E006	07/23/2024	Specific Conductance @ 25C (field)	927	micromhos/cm
G60S	Compliance	E006	07/23/2024	Sulfate, total	70.0	mg/L
G60S	Compliance	E006	07/23/2024	Temperature	17.4	degrees C
G60S	Compliance	E006	07/23/2024	Thallium, total	0.00038 U	mg/L
G60S	Compliance	E006	07/23/2024	Total Dissolved Solids	580	mg/L
G60S	Compliance	E006	07/23/2024	Turbidity, field	110	NTU
G64L	Compliance	E006	07/31/2024	Antimony, total	0.00043 U	mg/L
G64L	Compliance	E006	07/31/2024	Arsenic, total	0.00069 U	mg/L
G64L	Compliance	E006	07/31/2024	Barium, total	0.0960	mg/L
G64L	Compliance	E006	07/31/2024	Beryllium, total	0.00059 U	mg/L
G64L	Compliance	E006	07/31/2024	Boron, total	0.0100	mg/L
G64L	Compliance	E006	07/31/2024	Cadmium, total	0.00074 U	mg/L
G64L	Compliance	E006	07/31/2024	Calcium, total	120	mg/L
G64L	Compliance	E006	07/31/2024	Chloride, total	2.00	mg/L
G64L	Compliance	E006	07/31/2024	Chromium, total	0.0028 U	mg/L
G64L	Compliance	E006	07/31/2024	Cobalt, total	0.00048 U	mg/L
G64L	Compliance	E006	07/31/2024	Dissolved Oxygen	5.10	mg/L
G64L	Compliance	E006	07/31/2024	Fluoride, total	0.24 J	mg/L
G64L	Compliance	E006	07/31/2024	Lead, total	0.00022 U	mg/L
G64L	Compliance	E006	07/31/2024	Lithium, total	0.005 U	mg/L
G64L	Compliance	E006	07/31/2024	Mercury, total	0.00014 U	mg/L

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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G64L	Compliance	E006	07/31/2024	Molybdenum, total	0.00130	mg/L
G64L	Compliance	E006	07/31/2024	Oxidation Reduction Potential	191	mV
G64L	Compliance	E006	07/31/2024	pH (field)	7.0	SU
G64L	Compliance	E006	07/31/2024	Radium 226 + Radium 228, total	0.0928	pCi/L
G64L	Compliance	E006	07/31/2024	Selenium, total	0.00074 U	mg/L
G64L	Compliance	E006	07/31/2024	Specific Conductance @ 25C (field)	1,050	micromhos/cm
G64L	Compliance	E006	07/31/2024	Sulfate, total	57.0	mg/L
G64L	Compliance	E006	07/31/2024	Temperature	18.0	degrees C
G64L	Compliance	E006	07/31/2024	Thallium, total	0.00038 U	mg/L
G64L	Compliance	E006	07/31/2024	Total Dissolved Solids	640	mg/L
G64L	Compliance	E006	07/31/2024	Turbidity, field	6.90	NTU
G64S	Compliance	E006	08/01/2024	Antimony, total	0.00043 U	mg/L
G64S	Compliance	E006	08/01/2024	Arsenic, total	0.00130	mg/L
G64S	Compliance	E006	08/01/2024	Barium, total	0.180	mg/L
G64S	Compliance	E006	08/01/2024	Beryllium, total	0.00059 U	mg/L
G64S	Compliance	E006	08/01/2024	Boron, total	0.0190	mg/L
G64S	Compliance	E006	08/01/2024	Cadmium, total	0.00074 U	mg/L
G64S	Compliance	E006	08/01/2024	Calcium, total	100	mg/L
G64S	Compliance	E006	08/01/2024	Chloride, total	2.80	mg/L
G64S	Compliance	E006	08/01/2024	Chromium, total	0.0028 U	mg/L
G64S	Compliance	E006	08/01/2024	Cobalt, total	0.00048 U	mg/L
G64S	Compliance	E006	08/01/2024	Dissolved Oxygen	1.30	mg/L
G64S	Compliance	E006	08/01/2024	Fluoride, total	0.219 J	mg/L
G64S	Compliance	E006	08/01/2024	Lead, total	0.00022 U	mg/L
G64S	Compliance	E006	08/01/2024	Lithium, total	0.005 U	mg/L
G64S	Compliance	E006	08/01/2024	Mercury, total	0.00014 U	mg/L
G64S	Compliance	E006	08/01/2024	Molybdenum, total	0.00130	mg/L
G64S	Compliance	E006	08/01/2024	Oxidation Reduction Potential	6.00	mV
G64S	Compliance	E006	08/01/2024	pH (field)	6.9	SU
G64S	Compliance	E006	08/01/2024	Radium 226 + Radium 228, total	0.47	pCi/L
G64S	Compliance	E006	08/01/2024	Selenium, total	0.00074 U	mg/L
G64S	Compliance	E006	08/01/2024	Specific Conductance @ 25C (field)	781	micromhos/cm
G64S	Compliance	E006	08/01/2024	Sulfate, total	23.0	mg/L
G64S	Compliance	E006	08/01/2024	Temperature	20.9	degrees C
G64S	Compliance	E006	08/01/2024	Thallium, total	0.00038 U	mg/L
G64S	Compliance	E006	08/01/2024	Total Dissolved Solids	420 J	mg/L
G64S	Compliance	E006	08/01/2024	Turbidity, field	17.7	NTU

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Notes:
C = Celsius
cm = centimeter
mg/L = milligrams per liter
Missing Code (if applicable):
NR[1] = Select parameters were not analyzed.
NS[1] = This well has been, or will be, abandoned; therefore, a sample was not collected.
NS[2] = Well either needs or was undergoing maintenance, therefore, a sample was not collected.
NS[3] = A sample was not collected because the location was inaccessible.
NS[4] = The location could not be found, therefore a sample was not collected.
NS[5] = A sample was not collected because of damage to the well.
NS[6] = A sample was not collected because of pump issues.
NS[7] = A sample was not collected because the well was either dry or was purged dry and did not recover.
PM[1] = Select parameters were not analyzed as the well purged dry during sample collection and did not sufficiently recover to sample for all parameters.
mV = millivolts
NTU = Nephelometric Turbidity Units
pCi/L = picocuries per liter
R = resample
SU = Standard Units
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
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 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G02S	Background	E007	10/23/2024	Antimony, total	0.00043 U	mg/L
G02S	Background	E007	10/23/2024	Arsenic, total	0.00600	mg/L
G02S	Background	E007	10/23/2024	Barium, total	0.170	mg/L
G02S	Background	E007	10/23/2024	Beryllium, total	0.00059 U	mg/L
G02S	Background	E007	10/23/2024	Boron, total	0.0380	mg/L
G02S	Background	E007	10/23/2024	Cadmium, total	0.00074 U	mg/L
G02S	Background	E007	10/23/2024	Calcium, total	96.0	mg/L
G02S	Background	E007	10/23/2024	Chloride, total	1.30	mg/L
G02S	Background	E007	10/23/2024	Chromium, total	0.0028 U	mg/L
G02S	Background	E007	10/23/2024	Cobalt, total	0.00048 U	mg/L
G02S	Background	E007	10/23/2024	Dissolved Oxygen	1.80	mg/L
G02S	Background	E007	10/23/2024	Fluoride, total	0.305	mg/L
G02S	Background	E007	10/23/2024	Lead, total	0.00022 U	mg/L
G02S	Background	E007	10/23/2024	Lithium, total	0.005 U	mg/L
G02S	Background	E007	10/23/2024	Mercury, total	0.00014 U	mg/L
G02S	Background	E007	10/23/2024	Molybdenum, total	0.00081 J	mg/L
G02S	Background	E007	10/23/2024	Oxidation Reduction Potential	-127	mV
G02S	Background	E007	10/23/2024	pH (field)	6.7	SU
G02S	Background	E007	10/23/2024	Radium 226 + Radium 228, total	0.276	pCi/L
G02S	Background	E007	10/23/2024	Selenium, total	0.00074 U	mg/L
G02S	Background	E007	10/23/2024	Specific Conductance @ 25C (field)	700	micromhos/cm
G02S	Background	E007	10/23/2024	Sulfate, total	0.43 J	mg/L
G02S	Background	E007	10/23/2024	Temperature	13.5	degrees C
G02S	Background	E007	10/23/2024	Thallium, total	0.00038 U	mg/L
G02S	Background	E007	10/23/2024	Total Dissolved Solids	390	mg/L
G02S	Background	E007	10/23/2024	Turbidity, field	0	NTU
G50S	Background	E007	10/15/2024	Antimony, total	0.00043 U	mg/L
G50S	Background	E007	10/15/2024	Arsenic, total	0.00069 U	mg/L
G50S	Background	E007	10/15/2024	Barium, total	0.0630	mg/L
G50S	Background	E007	10/15/2024	Beryllium, total	0.00059 U	mg/L
G50S	Background	E007	10/15/2024	Boron, total	0.0160	mg/L
G50S	Background	E007	10/15/2024	Cadmium, total	0.00074 U	mg/L
G50S	Background	E007	10/15/2024	Calcium, total	91.0	mg/L
G50S	Background	E007	10/15/2024	Chloride, total	10.0	mg/L
G50S	Background	E007	10/15/2024	Chromium, total	0.0028 U	mg/L
G50S	Background	E007	10/15/2024	Cobalt, total	0.00048 U	mg/L
G50S	Background	E007	10/15/2024	Dissolved Oxygen	0	mg/L
G50S	Background	E007	10/15/2024	Fluoride, total	0.212 J	mg/L
G50S	Background	E007	10/15/2024	Lead, total	0.00022 U	mg/L
G50S	Background	E007	10/15/2024	Lithium, total	0.005 U	mg/L
G50S	Background	E007	10/15/2024	Mercury, total	0.00014 U	mg/L
G50S	Background	E007	10/15/2024	Molybdenum, total	0.00190	mg/L
G50S	Background	E007	10/15/2024	Oxidation Reduction Potential	30.0	mV
G50S	Background	E007	10/15/2024	pH (field)	10.5	SU
G50S	Background	E007	10/15/2024	Radium 226 + Radium 228, total	0.594	pCi/L
G50S	Background	E007	10/15/2024	Selenium, total	0.00074 U	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G50S	Background	E007	10/15/2024	Specific Conductance @ 25C (field)	707	micromhos/cm
G50S	Background	E007	10/15/2024	Sulfate, total	41.0	mg/L
G50S	Background	E007	10/15/2024	Temperature	13.0	degrees C
G50S	Background	E007	10/15/2024	Thallium, total	0.00038 U	mg/L
G50S	Background	E007	10/15/2024	Total Dissolved Solids	370 J	mg/L
G50S	Background	E007	10/15/2024	Turbidity, field	11.6	NTU
G51S	Background	E007	10/24/2024	Antimony, total	0.00043 U	mg/L
G51S	Background	E007	10/24/2024	Arsenic, total	0.00500	mg/L
G51S	Background	E007	10/24/2024	Barium, total	0.120	mg/L
G51S	Background	E007	10/24/2024	Beryllium, total	0.00059 U	mg/L
G51S	Background	E007	10/24/2024	Boron, total	0.0110 J+	mg/L
G51S	Background	E007	10/24/2024	Cadmium, total	0.00074 U	mg/L
G51S	Background	E007	10/24/2024	Calcium, total	96.0	mg/L
G51S	Background	E007	10/24/2024	Chloride, total	13.0	mg/L
G51S	Background	E007	10/24/2024	Chromium, total	0.0028 U	mg/L
G51S	Background	E007	10/24/2024	Cobalt, total	0.00058 J	mg/L
G51S	Background	E007	10/24/2024	Dissolved Oxygen	0	mg/L
G51S	Background	E007	10/24/2024	Fluoride, total	0.177 J	mg/L
G51S	Background	E007	10/24/2024	Lead, total	0.00580	mg/L
G51S	Background	E007	10/24/2024	Lithium, total	0.005 U	mg/L
G51S	Background	E007	10/24/2024	Mercury, total	0.00014 U	mg/L
G51S	Background	E007	10/24/2024	Molybdenum, total	0.00320	mg/L
G51S	Background	E007	10/24/2024	Oxidation Reduction Potential	-90.0	mV
G51S	Background	E007	10/24/2024	pH (field)	8.0	SU
G51S	Background	E007	10/24/2024	Radium 226 + Radium 228, total	1.04	pCi/L
G51S	Background	E007	10/24/2024	Selenium, total	0.00074 U	mg/L
G51S	Background	E007	10/24/2024	Specific Conductance @ 25C (field)	646	micromhos/cm
G51S	Background	E007	10/24/2024	Sulfate, total	63.0	mg/L
G51S	Background	E007	10/24/2024	Temperature	10.1	degrees C
G51S	Background	E007	10/24/2024	Thallium, total	0.00038 U	mg/L
G51S	Background	E007	10/24/2024	Total Dissolved Solids	360 J	mg/L
G51S	Background	E007	10/24/2024	Turbidity, field	235	NTU
G54L	Compliance	E007	10/24/2024	Antimony, total	0.00043 U	mg/L
G54L	Compliance	E007	10/24/2024	Arsenic, total	0.00210	mg/L
G54L	Compliance	E007	10/24/2024	Barium, total	0.220	mg/L
G54L	Compliance	E007	10/24/2024	Beryllium, total	0.00059 U	mg/L
G54L	Compliance	E007	10/24/2024	Boron, total	0.0071 U	mg/L
G54L	Compliance	E007	10/24/2024	Cadmium, total	0.00074 U	mg/L
G54L	Compliance	E007	10/24/2024	Calcium, total	210	mg/L
G54L	Compliance	E007	10/24/2024	Chloride, total	60.0	mg/L
G54L	Compliance	E007	10/24/2024	Chromium, total	0.0028 U	mg/L
G54L	Compliance	E007	10/24/2024	Cobalt, total	0.0011 J	mg/L
G54L	Compliance	E007	10/24/2024	Dissolved Oxygen	1.20	mg/L
G54L	Compliance	E007	10/24/2024	Fluoride, total	0.2 U	mg/L
G54L	Compliance	E007	10/24/2024	Lead, total	0.00022 U	mg/L
G54L	Compliance	E007	10/24/2024	Lithium, total	0.005 U	mg/L

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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G54L	Compliance	E007	10/24/2024	Mercury, total	0.00018 J	mg/L
G54L	Compliance	E007	10/24/2024	Molybdenum, total	0.00074 U	mg/L
G54L	Compliance	E007	10/24/2024	Oxidation Reduction Potential	-50.0	mV
G54L	Compliance	E007	10/24/2024	pH (field)	6.7	SU
G54L	Compliance	E007	10/24/2024	Radium 226 + Radium 228, total	0.35	pCi/L
G54L	Compliance	E007	10/24/2024	Selenium, total	0.00074 U	mg/L
G54L	Compliance	E007	10/24/2024	Specific Conductance @ 25C (field)	1,730	micromhos/cm
G54L	Compliance	E007	10/24/2024	Sulfate, total	120	mg/L
G54L	Compliance	E007	10/24/2024	Temperature	14.0	degrees C
G54L	Compliance	E007	10/24/2024	Thallium, total	0.00038 U	mg/L
G54L	Compliance	E007	10/24/2024	Total Dissolved Solids	920 J	mg/L
G54L	Compliance	E007	10/24/2024	Turbidity, field	16.1	NTU
G54S	Compliance	E007	10/16/2024	Antimony, total	0.00043 U	mg/L
G54S	Compliance	E007	10/16/2024	Arsenic, total	0.00260	mg/L
G54S	Compliance	E007	10/16/2024	Barium, total	0.210	mg/L
G54S	Compliance	E007	10/16/2024	Beryllium, total	0.00059 U	mg/L
G54S	Compliance	E007	10/16/2024	Boron, total	0.0310	mg/L
G54S	Compliance	E007	10/16/2024	Cadmium, total	0.00074 U	mg/L
G54S	Compliance	E007	10/16/2024	Calcium, total	120	mg/L
G54S	Compliance	E007	10/16/2024	Chloride, total	6.10	mg/L
G54S	Compliance	E007	10/16/2024	Chromium, total	0.0028 U	mg/L
G54S	Compliance	E007	10/16/2024	Cobalt, total	0.00057 J	mg/L
G54S	Compliance	E007	10/16/2024	Dissolved Oxygen	0	mg/L
G54S	Compliance	E007	10/16/2024	Fluoride, total	0.2 U	mg/L
G54S	Compliance	E007	10/16/2024	Lead, total	0.00022 U	mg/L
G54S	Compliance	E007	10/16/2024	Lithium, total	0.0071 J	mg/L
G54S	Compliance	E007	10/16/2024	Mercury, total	0.00014 U	mg/L
G54S	Compliance	E007	10/16/2024	Molybdenum, total	0.00086 J	mg/L
G54S	Compliance	E007	10/16/2024	Oxidation Reduction Potential	-75.0	mV
G54S	Compliance	E007	10/16/2024	pH (field)	6.7	SU
G54S	Compliance	E007	10/16/2024	Radium 226 + Radium 228, total	2.11	pCi/L
G54S	Compliance	E007	10/16/2024	Selenium, total	0.00074 U	mg/L
G54S	Compliance	E007	10/16/2024	Specific Conductance @ 25C (field)	982	micromhos/cm
G54S	Compliance	E007	10/16/2024	Sulfate, total	28.0	mg/L
G54S	Compliance	E007	10/16/2024	Temperature	13.9	degrees C
G54S	Compliance	E007	10/16/2024	Thallium, total	0.00038 U	mg/L
G54S	Compliance	E007	10/16/2024	Total Dissolved Solids	510	mg/L
G54S	Compliance	E007	10/16/2024	Turbidity, field	2.30	NTU
G57S	Compliance	E007	10/16/2024	Antimony, total	0.00043 U	mg/L
G57S	Compliance	E007	10/16/2024	Arsenic, total	0.00069 U	mg/L
G57S	Compliance	E007	10/16/2024	Barium, total	0.170	mg/L
G57S	Compliance	E007	10/16/2024	Beryllium, total	0.00059 U	mg/L
G57S	Compliance	E007	10/16/2024	Boron, total	0.0110	mg/L
G57S	Compliance	E007	10/16/2024	Cadmium, total	0.00074 U	mg/L
G57S	Compliance	E007	10/16/2024	Calcium, total	170	mg/L
G57S	Compliance	E007	10/16/2024	Chloride, total	16.0	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G57S	Compliance	E007	10/16/2024	Chromium, total	0.0028 U	mg/L
G57S	Compliance	E007	10/16/2024	Cobalt, total	0.00059 J	mg/L
G57S	Compliance	E007	10/16/2024	Dissolved Oxygen	0	mg/L
G57S	Compliance	E007	10/16/2024	Fluoride, total	0.202 J	mg/L
G57S	Compliance	E007	10/16/2024	Lead, total	0.00022 U	mg/L
G57S	Compliance	E007	10/16/2024	Lithium, total	0.005 U	mg/L
G57S	Compliance	E007	10/16/2024	Mercury, total	0.00014 U	mg/L
G57S	Compliance	E007	10/16/2024	Molybdenum, total	0.00096 J	mg/L
G57S	Compliance	E007	10/16/2024	Oxidation Reduction Potential	31.0	mV
G57S	Compliance	E007	10/16/2024	pH (field)	6.6	SU
G57S	Compliance	E007	10/16/2024	Radium 226 + Radium 228, total	1.01	pCi/L
G57S	Compliance	E007	10/16/2024	Selenium, total	0.00074 U	mg/L
G57S	Compliance	E007	10/16/2024	Specific Conductance @ 25C (field)	1,450	micromhos/cm
G57S	Compliance	E007	10/16/2024	Sulfate, total	47.0	mg/L
G57S	Compliance	E007	10/16/2024	Temperature	15.8	degrees C
G57S	Compliance	E007	10/16/2024	Thallium, total	0.00038 U	mg/L
G57S	Compliance	E007	10/16/2024	Total Dissolved Solids	800	mg/L
G57S	Compliance	E007	10/16/2024	Turbidity, field	4.60	NTU
G60L	Compliance	E007	10/17/2024	Antimony, total	0.00043 U	mg/L
G60L	Compliance	E007	10/17/2024	Arsenic, total	0.00069 U	mg/L
G60L	Compliance	E007	10/17/2024	Barium, total	0.0240	mg/L
G60L	Compliance	E007	10/17/2024	Beryllium, total	0.00059 U	mg/L
G60L	Compliance	E007	10/17/2024	Boron, total	0.0230 J+	mg/L
G60L	Compliance	E007	10/17/2024	Cadmium, total	0.00074 U	mg/L
G60L	Compliance	E007	10/17/2024	Calcium, total	95.0	mg/L
G60L	Compliance	E007	10/17/2024	Chloride, total	8.00	mg/L
G60L	Compliance	E007	10/17/2024	Chromium, total	0.0028 U	mg/L
G60L	Compliance	E007	10/17/2024	Cobalt, total	0.00550	mg/L
G60L	Compliance	E007	10/17/2024	Dissolved Oxygen	0	mg/L
G60L	Compliance	E007	10/17/2024	Fluoride, total	0.2 U	mg/L
G60L	Compliance	E007	10/17/2024	Lead, total	0.00022 U	mg/L
G60L	Compliance	E007	10/17/2024	Lithium, total	0.005 U	mg/L
G60L	Compliance	E007	10/17/2024	Mercury, total	0.00014 U	mg/L
G60L	Compliance	E007	10/17/2024	Molybdenum, total	0.00074 U	mg/L
G60L	Compliance	E007	10/17/2024	Oxidation Reduction Potential	58.0	mV
G60L	Compliance	E007	10/17/2024	pH (field)	8.3	SU
G60L	Compliance	E007	10/17/2024	Radium 226 + Radium 228, total	0.48	pCi/L
G60L	Compliance	E007	10/17/2024	Selenium, total	0.00074 U	mg/L
G60L	Compliance	E007	10/17/2024	Specific Conductance @ 25C (field)	656	micromhos/cm
G60L	Compliance	E007	10/17/2024	Sulfate, total	160	mg/L
G60L	Compliance	E007	10/17/2024	Temperature	13.8	degrees C
G60L	Compliance	E007	10/17/2024	Thallium, total	0.00038 U	mg/L
G60L	Compliance	E007	10/17/2024	Total Dissolved Solids	500	mg/L
G60L	Compliance	E007	10/17/2024	Turbidity, field	25.2	NTU
G60S	Compliance	E007	10/17/2024	Antimony, total	0.00043 U	mg/L
G60S	Compliance	E007	10/17/2024	Arsenic, total	0.00140	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024
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DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G60S	Compliance	E007	10/17/2024	Barium, total	0.150	mg/L
G60S	Compliance	E007	10/17/2024	Beryllium, total	0.00059 U	mg/L
G60S	Compliance	E007	10/17/2024	Boron, total	0.0150 J+	mg/L
G60S	Compliance	E007	10/17/2024	Cadmium, total	0.00074 U	mg/L
G60S	Compliance	E007	10/17/2024	Calcium, total	130	mg/L
G60S	Compliance	E007	10/17/2024	Chloride, total	4.60	mg/L
G60S	Compliance	E007	10/17/2024	Chromium, total	0.0028 U	mg/L
G60S	Compliance	E007	10/17/2024	Cobalt, total	0.00048 U	mg/L
G60S	Compliance	E007	10/17/2024	Dissolved Oxygen	0	mg/L
G60S	Compliance	E007	10/17/2024	Fluoride, total	0.172 U	mg/L
G60S	Compliance	E007	10/17/2024	Lead, total	0.00022 U	mg/L
G60S	Compliance	E007	10/17/2024	Lithium, total	0.005 U	mg/L
G60S	Compliance	E007	10/17/2024	Mercury, total	0.00014 U	mg/L
G60S	Compliance	E007	10/17/2024	Molybdenum, total	0.00097 J	mg/L
G60S	Compliance	E007	10/17/2024	Oxidation Reduction Potential	-56.0	mV
G60S	Compliance	E007	10/17/2024	pH (field)	7.3	SU
G60S	Compliance	E007	10/17/2024	Radium 226 + Radium 228, total	1.73	pCi/L
G60S	Compliance	E007	10/17/2024	Selenium, total	0.00074 U	mg/L
G60S	Compliance	E007	10/17/2024	Specific Conductance @ 25C (field)	731	micromhos/cm
G60S	Compliance	E007	10/17/2024	Sulfate, total	70.0	mg/L
G60S	Compliance	E007	10/17/2024	Temperature	14.5	degrees C
G60S	Compliance	E007	10/17/2024	Thallium, total	0.00038 U	mg/L
G60S	Compliance	E007	10/17/2024	Total Dissolved Solids	580	mg/L
G60S	Compliance	E007	10/17/2024	Turbidity, field	13.3	NTU
G64L	Compliance	E007	10/22/2024	Antimony, total	0.00043 U	mg/L
G64L	Compliance	E007	10/22/2024	Arsenic, total	0.00069 U	mg/L
G64L	Compliance	E007	10/22/2024	Barium, total	0.0990	mg/L
G64L	Compliance	E007	10/22/2024	Beryllium, total	0.00059 U	mg/L
G64L	Compliance	E007	10/22/2024	Boron, total	0.0085 J	mg/L
G64L	Compliance	E007	10/22/2024	Cadmium, total	0.00074 U	mg/L
G64L	Compliance	E007	10/22/2024	Calcium, total	120	mg/L
G64L	Compliance	E007	10/22/2024	Chloride, total	1.70	mg/L
G64L	Compliance	E007	10/22/2024	Chromium, total	0.0028 U	mg/L
G64L	Compliance	E007	10/22/2024	Cobalt, total	0.00048 U	mg/L
G64L	Compliance	E007	10/22/2024	Dissolved Oxygen	2.30	mg/L
G64L	Compliance	E007	10/22/2024	Fluoride, total	0.211 J	mg/L
G64L	Compliance	E007	10/22/2024	Lead, total	0.00022 U	mg/L
G64L	Compliance	E007	10/22/2024	Lithium, total	0.005 U	mg/L
G64L	Compliance	E007	10/22/2024	Mercury, total	0.00018 J	mg/L
G64L	Compliance	E007	10/22/2024	Molybdenum, total	0.00098 J	mg/L
G64L	Compliance	E007	10/22/2024	Oxidation Reduction Potential	92.0	mV
G64L	Compliance	E007	10/22/2024	pH (field)	6.9	SU
G64L	Compliance	E007	10/22/2024	Radium 226 + Radium 228, total	0.114	pCi/L
G64L	Compliance	E007	10/22/2024	Selenium, total	0.00074 U	mg/L
G64L	Compliance	E007	10/22/2024	Specific Conductance @ 25C (field)	1,060	micromhos/cm
G64L	Compliance	E007	10/22/2024	Sulfate, total	53.0	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024
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DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G64L	Compliance	E007	10/22/2024	Temperature	15.3	degrees C
G64L	Compliance	E007	10/22/2024	Thallium, total	0.00038 U	mg/L
G64L	Compliance	E007	10/22/2024	Total Dissolved Solids	590	mg/L
G64L	Compliance	E007	10/22/2024	Turbidity, field	0	NTU
G64S	Compliance	E007	10/22/2024	Antimony, total	0.00043 U	mg/L
G64S	Compliance	E007	10/22/2024	Arsenic, total	0.00089 J	mg/L
G64S	Compliance	E007	10/22/2024	Barium, total	0.160	mg/L
G64S	Compliance	E007	10/22/2024	Beryllium, total	0.00059 U	mg/L
G64S	Compliance	E007	10/22/2024	Boron, total	0.0150	mg/L
G64S	Compliance	E007	10/22/2024	Cadmium, total	0.00074 U	mg/L
G64S	Compliance	E007	10/22/2024	Calcium, total	97.0	mg/L
G64S	Compliance	E007	10/22/2024	Chloride, total	2.70	mg/L
G64S	Compliance	E007	10/22/2024	Chromium, total	0.0028 U	mg/L
G64S	Compliance	E007	10/22/2024	Cobalt, total	0.00048 U	mg/L
G64S	Compliance	E007	10/22/2024	Dissolved Oxygen	2.30	mg/L
G64S	Compliance	E007	10/22/2024	Fluoride, total	0.178 J	mg/L
G64S	Compliance	E007	10/22/2024	Lead, total	0.00022 U	mg/L
G64S	Compliance	E007	10/22/2024	Lithium, total	0.005 U	mg/L
G64S	Compliance	E007	10/22/2024	Mercury, total	0.00014 U	mg/L
G64S	Compliance	E007	10/22/2024	Molybdenum, total	0.00110	mg/L
G64S	Compliance	E007	10/22/2024	Oxidation Reduction Potential	-106	mV
G64S	Compliance	E007	10/22/2024	pH (field)	6.9	SU
G64S	Compliance	E007	10/22/2024	Radium 226 + Radium 228, total	1.13	pCi/L
G64S	Compliance	E007	10/22/2024	Selenium, total	0.00074 U	mg/L
G64S	Compliance	E007	10/22/2024	Specific Conductance @ 25C (field)	822	micromhos/cm
G64S	Compliance	E007	10/22/2024	Sulfate, total	24.0	mg/L
G64S	Compliance	E007	10/22/2024	Temperature	17.5	degrees C
G64S	Compliance	E007	10/22/2024	Thallium, total	0.00038 U	mg/L
G64S	Compliance	E007	10/22/2024	Total Dissolved Solids	450	mg/L
G64S	Compliance	E007	10/22/2024	Turbidity, field	10.9	NTU

Notes:
C = Celsius
cm = centimeter
Events:
E007 = Quarter 4, 2024 sampling event
mg/L = milligrams per liter
mV = millivolts
NTU = Nephelometric Turbidity Units
pCi/L = picocuries per liter
Result Code (if applicable):
NR[1] = Parameter not analyzed.
NS[1] = Well has been, or will be, abandoned; therefore, a sample was not collected.
NS[2] = Well either needs or was undergoing maintenance; therefore, a sample was not collected.
NS[3] = The location was not accessible; therefore, a sample was not collected.
NS[4] = The location could not be found; therefore, a sample was not collected.
NS[5] = The location was damaged; therefore, a sample was not collected.
NS[6] = Sampling pump could not yield a sample.
NS[7] = Well was either dry or purged dry and did not recover sufficiently to yield adequate volume for a sample.
NS[8] = A sample was not collected.
PM[1] = Parameter not analyzed as the well purged dry during sample collection and did not sufficiently recover to yield adequate sample volume for analysis.
Result qualifiers as defined in the United States Environmental Protection Agency's *National Functional Guidelines for Inorganic Superfund Methods Data Review*, EPA 542-R-20-006. November 2020.:
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+ = The result is an estimated quantity, but the result may be biased high.
U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.
SU = Standard Units

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G54L	PMP	E004	Antimony, total	mg/L	04/14/21 - 01/30/24	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G54L	PMP	E004	Arsenic, total	mg/L	04/14/21 - 01/30/24	12	0	CB around linear reg	-0.00427	0.010	Standard	No Exceedance
G54L	PMP	E004	Barium, total	mg/L	04/14/21 - 01/30/24	12	0	CI around mean	0.163	2.0	Standard	No Exceedance
G54L	PMP	E004	Beryllium, total	mg/L	04/14/21 - 01/30/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G54L	PMP	E004	Boron, total	mg/L	04/14/21 - 01/30/24	13	0	CI around geomean	0.0184	2	Standard	No Exceedance
G54L	PMP	E004	Cadmium, total	mg/L	04/14/21 - 01/30/24	12	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G54L	PMP	E004	Chloride, total	mg/L	04/14/21 - 01/30/24	13	0	CB around T-S line	-0.285	200	Standard	No Exceedance
G54L	PMP	E004	Chromium, total	mg/L	04/14/21 - 01/30/24	12	92	CI around median	0.004	0.1	Standard	No Exceedance
G54L	PMP	E004	Cobalt, total	mg/L	04/14/21 - 01/30/24	12	50	CI around median	0.002	0.006	Standard	No Exceedance
G54L	PMP	E004	Fluoride, total	mg/L	04/14/21 - 01/30/24	13	85	CI around median	0.25	4.0	Standard	No Exceedance
G54L	PMP	E004	Lead, total	mg/L	04/14/21 - 01/30/24	12	86	Most recent sample	0.001	0.0150	Background	No Exceedance
G54L	PMP	E004	Lithium, total	mg/L	04/14/21 - 01/30/24	12	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G54L	PMP	E004	Mercury, total	mg/L	04/14/21 - 01/30/24	12	92	CI around median	0.0002	0.002	Standard	No Exceedance
G54L	PMP	E004	Molybdenum, total	mg/L	04/14/21 - 01/30/24	12	58	CI around median	0.001	0.1	Standard	No Exceedance
G54L	PMP	E004	pH (field)	SU	04/14/21 - 01/30/24	19	0	CI around median	6.5/6.6	6.5/9.0	Standard/Standard	No Exceedance
G54L	PMP	E004	Radium 226 + Radium 228, total	pCi/L	04/14/21 - 01/30/24	12	0	CI around mean	0.358	5	Standard	No Exceedance
G54L	PMP	E004	Selenium, total	mg/L	04/14/21 - 01/30/24	12	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G54L	PMP	E004	Sulfate, total	mg/L	04/14/21 - 01/30/24	13	0	CI around mean	71	400	Standard	No Exceedance
G54L	PMP	E004	Thallium, total	mg/L	04/14/21 - 01/30/24	12	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G54L	PMP	E004	Total Dissolved Solids	mg/L	04/14/21 - 01/30/24	19	0	CI around mean	717	1,200	Standard	No Exceedance
G54S	UA	E004	Antimony, total	mg/L	12/04/15 - 01/19/24	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G54S	UA	E004	Arsenic, total	mg/L	12/04/15 - 01/19/24	12	24	CI around median	0.001	0.010	Standard	No Exceedance
G54S	UA	E004	Barium, total	mg/L	12/04/15 - 01/19/24	12	0	CI around mean	0.208	2.0	Standard	No Exceedance
G54S	UA	E004	Beryllium, total	mg/L	12/04/15 - 01/19/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G54S	UA	E004	Boron, total	mg/L	12/04/15 - 01/19/24	26	0	CI around mean	0.0324	2	Standard	No Exceedance
G54S	UA	E004	Cadmium, total	mg/L	12/04/15 - 01/19/24	12	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G54S	UA	E004	Chloride, total	mg/L	12/04/15 - 01/19/24	24	10	CI around geomean	2.05	200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G54S	UA	E004	Chromium, total	mg/L	12/04/15 - 01/19/24	12	100	All ND - Last	0.004	0.1	Standard	No Exceedance
G54S	UA	E004	Cobalt, total	mg/L	12/04/15 - 01/19/24	12	100	All ND - Last	0.002	0.006	Standard	No Exceedance
G54S	UA	E004	Fluoride, total	mg/L	12/04/15 - 01/19/24	25	77	CI around median	0.25	4.0	Standard	No Exceedance
G54S	UA	E004	Lead, total	mg/L	12/04/15 - 01/19/24	12	100	All ND - Last	0.001	0.0150	Background	No Exceedance
G54S	UA	E004	Lithium, total	mg/L	12/04/15 - 01/19/24	12	75	CB around T-S line	0.01	0.04	Standard	No Exceedance
G54S	UA	E004	Mercury, total	mg/L	12/04/15 - 01/19/24	12	85	CI around median	0.0002	0.002	Standard	No Exceedance
G54S	UA	E004	Molybdenum, total	mg/L	12/04/15 - 01/19/24	12	0	CI around mean	0.00141	0.1	Standard	No Exceedance
G54S	UA	E004	pH (field)	SU	12/04/15 - 01/19/24	33	0	CB around linear reg	6.5/6.9	6.5/9.0	Standard/Standard	No Exceedance
G54S	UA	E004R	pH (field)	SU	12/04/15 - 02/06/24	34	0	CB around linear reg	6.5/6.9	6.5/9.0	Standard/Standard	No Exceedance
G54S	UA	E004	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 01/19/24	12	0	CI around geomean	0.657	5	Standard	No Exceedance
G54S	UA	E004	Selenium, total	mg/L	12/04/15 - 01/19/24	12	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G54S	UA	E004	Sulfate, total	mg/L	12/04/15 - 01/19/24	24	0	CB around T-S line	31.1	400	Standard	No Exceedance
G54S	UA	E004	Thallium, total	mg/L	12/04/15 - 01/19/24	12	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G54S	UA	E004	Total Dissolved Solids	mg/L	12/04/15 - 01/19/24	32	0	CI around mean	519	1,200	Standard	No Exceedance
G57S	UA	E004	Antimony, total	mg/L	12/04/15 - 01/26/24	12	92	CI around median	0.003	0.006	Standard	No Exceedance
G57S	UA	E004	Arsenic, total	mg/L	12/04/15 - 01/26/24	12	90	Most recent sample	0.001	0.010	Standard	No Exceedance
G57S	UA	E004	Barium, total	mg/L	12/04/15 - 01/26/24	12	0	CI around median	0.13	2.0	Standard	No Exceedance
G57S	UA	E004	Beryllium, total	mg/L	12/04/15 - 01/26/24	12	92	CI around median	0.001	0.004	Standard	No Exceedance
G57S	UA	E004	Boron, total	mg/L	12/04/15 - 01/26/24	25	44	CI around median	0.01	2	Standard	No Exceedance
G57S	UA	E004	Cadmium, total	mg/L	12/04/15 - 01/26/24	12	92	CI around median	0.001	0.005	Standard	No Exceedance
G57S	UA	E004	Chloride, total	mg/L	12/04/15 - 01/26/24	25	2	CI around median	18	200	Standard	No Exceedance
G57S	UA	E004	Chromium, total	mg/L	12/04/15 - 01/26/24	12	92	Most recent sample	0.004	0.1	Standard	No Exceedance
G57S	UA	E004	Cobalt, total	mg/L	12/04/15 - 01/26/24	12	92	Most recent sample	0.002	0.006	Standard	No Exceedance
G57S	UA	E004	Fluoride, total	mg/L	12/04/15 - 01/26/24	26	33	CI around median	0.25	4.0	Standard	No Exceedance
G57S	UA	E004	Lead, total	mg/L	12/04/15 - 01/26/24	12	76	CI around median	0.001	0.0150	Background	No Exceedance
G57S	UA	E004	Lithium, total	mg/L	12/04/15 - 01/26/24	12	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G57S	UA	E004	Mercury, total	mg/L	12/04/15 - 01/26/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
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DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G57S	UA	E004	Molybdenum, total	mg/L	12/04/15 - 01/26/24	12	92	CI around median	0.001	0.1	Standard	No Exceedance
G57S	UA	E004	pH (field)	SU	12/04/15 - 01/26/24	32	0	CB around linear reg	6.5/6.8	6.5/9.0	Standard/Standard	No Exceedance
G57S	UA	E004	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 01/26/24	12	0	CI around mean	0.238	5	Standard	No Exceedance
G57S	UA	E004	Selenium, total	mg/L	12/04/15 - 01/26/24	12	92	Most recent sample	0.001	0.05	Standard	No Exceedance
G57S	UA	E004	Sulfate, total	mg/L	12/04/15 - 01/26/24	24	0	CB around linear reg	46.3	400	Standard	No Exceedance
G57S	UA	E004	Thallium, total	mg/L	12/04/15 - 01/26/24	12	92	CI around median	0.001	0.002	Standard	No Exceedance
G57S	UA	E004	Total Dissolved Solids	mg/L	12/04/15 - 01/26/24	32	0	CB around linear reg	784	1,200	Standard	No Exceedance
G60L	PMP	E004	Antimony, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G60L	PMP	E004	Arsenic, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.001	0.010	Standard	No Exceedance
G60L	PMP	E004	Barium, total	mg/L	04/14/21 - 01/25/24	12	0	CI around mean	0.0159	2.0	Standard	No Exceedance
G60L	PMP	E004	Beryllium, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G60L	PMP	E004	Boron, total	mg/L	04/14/21 - 01/25/24	13	0	CI around geomean	0.0257	2	Standard	No Exceedance
G60L	PMP	E004	Cadmium, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G60L	PMP	E004	Chloride, total	mg/L	04/14/21 - 01/25/24	13	0	CB around linear reg	7.5	200	Standard	No Exceedance
G60L	PMP	E004	Chromium, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.004	0.1	Standard	No Exceedance
G60L	PMP	E004	Cobalt, total	mg/L	04/14/21 - 01/25/24	12	17	CI around mean	0.00268	0.006	Standard	No Exceedance
G60L	PMP	E004	Fluoride, total	mg/L	04/14/21 - 01/25/24	13	100	All ND - Last	0.25	4.0	Standard	No Exceedance
G60L	PMP	E004	Lead, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.001	0.0150	Background	No Exceedance
G60L	PMP	E004	Lithium, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G60L	PMP	E004	Mercury, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G60L	PMP	E004	Molybdenum, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.001	0.1	Standard	No Exceedance
G60L	PMP	E004	pH (field)	SU	04/14/21 - 01/25/24	19	0	CB around linear reg	5.6/6.1	6.5/9.0	Standard/Standard	Exceedance
G60L	PMP	E004	Radium 226 + Radium 228, total	pCi/L	04/14/21 - 01/25/24	12	0	CI around mean	0.249	5	Standard	No Exceedance
G60L	PMP	E004	Selenium, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G60L	PMP	E004	Sulfate, total	mg/L	04/14/21 - 01/25/24	13	8	CI around mean	153	400	Standard	No Exceedance
G60L	PMP	E004	Thallium, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G60L	PMP	E004	Total Dissolved Solids	mg/L	04/14/21 - 01/25/24	19	0	CI around mean	549	1,200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G60S	UA	E004	Antimony, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G60S	UA	E004	Arsenic, total	mg/L	12/04/15 - 01/25/24	12	15	CI around geomean	0.00101	0.010	Standard	No Exceedance
G60S	UA	E004	Barium, total	mg/L	12/04/15 - 01/25/24	12	0	CI around mean	0.142	2.0	Standard	No Exceedance
G60S	UA	E004	Beryllium, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G60S	UA	E004	Boron, total	mg/L	12/04/15 - 01/25/24	27	9	CB around T-S line	0.0267	2	Standard	No Exceedance
G60S	UA	E004	Cadmium, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G60S	UA	E004	Chloride, total	mg/L	12/04/15 - 01/25/24	25	2	CI around geomean	7.74	200	Standard	No Exceedance
G60S	UA	E004	Chromium, total	mg/L	12/04/15 - 01/25/24	12	50	CI around median	0.004	0.1	Standard	No Exceedance
G60S	UA	E004	Cobalt, total	mg/L	12/04/15 - 01/25/24	12	75	CI around median	0.002	0.006	Standard	No Exceedance
G60S	UA	E004	Fluoride, total	mg/L	12/04/15 - 01/25/24	26	46	CI around median	0.25	4.0	Standard	No Exceedance
G60S	UA	E004	Lead, total	mg/L	12/04/15 - 01/25/24	12	30	CI around geomean	0.00108	0.0150	Background	No Exceedance
G60S	UA	E004	Lithium, total	mg/L	12/04/15 - 01/25/24	12	83	CI around median	0.01	0.04	Standard	No Exceedance
G60S	UA	E004	Mercury, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G60S	UA	E004	Molybdenum, total	mg/L	12/04/15 - 01/25/24	12	50	CI around median	0.001	0.1	Standard	No Exceedance
G60S	UA	E004	pH (field)	SU	12/04/15 - 01/25/24	33	0	CI around mean	6.7/6.8	6.5/9.0	Standard/Standard	No Exceedance
G60S	UA	E004	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 01/25/24	12	0	CI around geomean	0.756	5	Standard	No Exceedance
G60S	UA	E004	Selenium, total	mg/L	12/04/15 - 01/25/24	12	83	CI around median	0.001	0.05	Standard	No Exceedance
G60S	UA	E004	Sulfate, total	mg/L	12/04/15 - 01/25/24	26	0	CI around median	67	400	Standard	No Exceedance
G60S	UA	E004	Thallium, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G60S	UA	E004	Total Dissolved Solids	mg/L	12/04/15 - 01/25/24	33	0	CI around median	550	1,200	Standard	No Exceedance
G64L	PMP	E004	Antimony, total	mg/L	05/15/23 - 02/01/24	4	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G64L	PMP	E004	Arsenic, total	mg/L	05/15/23 - 02/01/24	4	40	CI around mean	-0.000274	0.010	Standard	No Exceedance
G64L	PMP	E004	Barium, total	mg/L	05/15/23 - 02/01/24	4	0	CI around mean	0.0746	2.0	Standard	No Exceedance
G64L	PMP	E004	Beryllium, total	mg/L	05/15/23 - 02/01/24	4	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G64L	PMP	E004	Boron, total	mg/L	01/11/23 - 02/01/24	5	27	CI around mean	0.000126	2	Standard	No Exceedance
G64L	PMP	E004	Cadmium, total	mg/L	05/15/23 - 02/01/24	4	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G64L	PMP	E004	Chloride, total	mg/L	01/11/23 - 02/01/24	5	9	CI around mean	1.79	200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
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DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G64L	PMP	E004	Chromium, total	mg/L	05/15/23 - 02/01/24	4	50	CI around mean	0.00136	0.1	Standard	No Exceedance
G64L	PMP	E004	Cobalt, total	mg/L	05/15/23 - 02/01/24	4	100	All ND - Last	0.002	0.006	Standard	No Exceedance
G64L	PMP	E004	Fluoride, total	mg/L	01/11/23 - 02/01/24	5	40	CI around mean	0.186	4.0	Standard	No Exceedance
G64L	PMP	E004	Lead, total	mg/L	05/15/23 - 02/01/24	4	40	CI around mean	-0.000319	0.0150	Background	No Exceedance
G64L	PMP	E004	Lithium, total	mg/L	05/15/23 - 02/01/24	4	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G64L	PMP	E004	Mercury, total	mg/L	05/15/23 - 02/01/24	4	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G64L	PMP	E004	Molybdenum, total	mg/L	05/15/23 - 02/01/24	4	50	CI around mean	0.00066	0.1	Standard	No Exceedance
G64L	PMP	E004	pH (field)	SU	05/21/21 - 02/01/24	12	0	CI around mean	6.8/7.2	6.5/9.0	Standard/Standard	No Exceedance
G64L	PMP	E004	Radium 226 + Radium 228, total	pCi/L	05/15/23 - 02/01/24	4	0	CI around mean	0.379	5	Standard	No Exceedance
G64L	PMP	E004	Selenium, total	mg/L	05/15/23 - 02/01/24	4	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G64L	PMP	E004	Sulfate, total	mg/L	01/11/23 - 02/01/24	5	0	CI around mean	14.4	400	Standard	No Exceedance
G64L	PMP	E004	Thallium, total	mg/L	05/15/23 - 02/01/24	4	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G64L	PMP	E004	Total Dissolved Solids	mg/L	05/21/21 - 02/01/24	12	0	CI around mean	544	1,200	Standard	No Exceedance
G64S	UA	E004	Antimony, total	mg/L	12/04/15 - 01/25/24	12	92	CI around median	0.003	0.006	Standard	No Exceedance
G64S	UA	E004	Arsenic, total	mg/L	12/04/15 - 01/25/24	12	10	CB around linear reg	-0.000627	0.010	Standard	No Exceedance
G64S	UA	E004	Barium, total	mg/L	12/04/15 - 01/25/24	12	0	CI around mean	0.16	2.0	Standard	No Exceedance
G64S	UA	E004	Beryllium, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G64S	UA	E004	Boron, total	mg/L	12/04/15 - 01/25/24	25	3	CI around geomean	0.0149	2	Standard	No Exceedance
G64S	UA	E004	Cadmium, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G64S	UA	E004	Chloride, total	mg/L	12/04/15 - 01/25/24	24	4	CI around geomean	3.28	200	Standard	No Exceedance
G64S	UA	E004	Chromium, total	mg/L	12/04/15 - 01/25/24	12	92	CI around median	0.004	0.1	Standard	No Exceedance
G64S	UA	E004	Cobalt, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.002	0.006	Standard	No Exceedance
G64S	UA	E004	Fluoride, total	mg/L	12/04/15 - 01/25/24	26	15	CI around median	0.287	4.0	Standard	No Exceedance
G64S	UA	E004	Lead, total	mg/L	12/04/15 - 01/25/24	12	43	CI around median	0.001	0.0150	Background	No Exceedance
G64S	UA	E004	Lithium, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G64S	UA	E004	Mercury, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G64S	UA	E004	Molybdenum, total	mg/L	12/04/15 - 01/25/24	12	17	CB around linear reg	0.000539	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G64S	UA	E004	pH (field)	SU	12/04/15 - 01/25/24	33	0	CI around median	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance
G64S	UA	E004	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 01/25/24	12	0	CI around mean	0.587	5	Standard	No Exceedance
G64S	UA	E004	Selenium, total	mg/L	12/04/15 - 01/25/24	12	92	CI around median	0.001	0.05	Standard	No Exceedance
G64S	UA	E004	Sulfate, total	mg/L	12/04/15 - 01/25/24	24	0	CI around mean	23.8	400	Standard	No Exceedance
G64S	UA	E004	Thallium, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G64S	UA	E004	Total Dissolved Solids	mg/L	12/04/15 - 01/25/24	31	0	CI around median	420	1,200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
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DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Notes:
Compliance Result:

No Exceedance: the statistical result did not exceed the GWPS.

Exceedance: The statistical result exceeded the GWPS.

HSU = hydrostratigraphic unit:

PMP = Potential Migration Pathway

UA = Uppermost Aquifer

mg/L = milligrams per liter
ND = non-detect
pCi/L = picocuries per liter
R = resample
SU = standard units
Sample Count = number of samples from Sampled Date Range used to calculate the Statistical Result
Statistical Calculation = method used to calculate the statistical result:

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

CB around T-S line = Confidence band around Thiel-Sen line

CB around linear reg = Confidence band around linear regression

CI around geomean = Confidence interval around the geometric mean

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

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

Statistical Result = calculated in accordance with the Statistical Analysis Plan using constituent concentrations observed at each monitoring well during all sampling events within the specified date range
For pH, the values presented are the lower / upper limits
GWPS = Groundwater Protection Standard
GWPS Source:

Standard = standard specified in 35 I.A.C. § 845.600(a)(1)

Background = background concentration (see cover page for additional information)

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G54L	PMP	E005	Antimony, total	mg/L	04/14/21 - 04/23/24	13	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G54L	PMP	E005	Arsenic, total	mg/L	04/14/21 - 04/23/24	13	0	CB around linear reg	-0.00377	0.010	Standard	No Exceedance
G54L	PMP	E005	Barium, total	mg/L	04/14/21 - 04/23/24	13	0	CI around mean	0.167	2.0	Standard	No Exceedance
G54L	PMP	E005	Beryllium, total	mg/L	04/14/21 - 04/23/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G54L	PMP	E005	Boron, total	mg/L	04/14/21 - 04/23/24	14	6	CI around geomean	0.0149	2	Standard	No Exceedance
G54L	PMP	E005	Cadmium, total	mg/L	04/14/21 - 04/23/24	13	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G54L	PMP	E005	Chloride, total	mg/L	04/14/21 - 04/23/24	14	0	CB around T-S line	21	200	Standard	No Exceedance
G54L	PMP	E005	Chromium, total	mg/L	04/14/21 - 04/23/24	13	92	CI around median	0.004	0.1	Standard	No Exceedance
G54L	PMP	E005	Cobalt, total	mg/L	04/14/21 - 04/23/24	13	54	CB around T-S line	-0.00524	0.006	Standard	No Exceedance
G54L	PMP	E005	Fluoride, total	mg/L	04/14/21 - 04/23/24	14	86	CI around median	0.25	4.0	Standard	No Exceedance
G54L	PMP	E005	Lead, total	mg/L	04/14/21 - 04/23/24	13	87	Most recent sample	0.001	0.0150	Background	No Exceedance
G54L	PMP	E005	Lithium, total	mg/L	04/14/21 - 04/23/24	13	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G54L	PMP	E005	Mercury, total	mg/L	04/14/21 - 04/23/24	13	92	CI around median	0.0002	0.002	Standard	No Exceedance
G54L	PMP	E005	Molybdenum, total	mg/L	04/14/21 - 04/23/24	13	54	CI around median	0.001	0.1	Standard	No Exceedance
G54L	PMP	E005	pH (field)	SU	04/14/21 - 04/23/24	20	0	CI around median	6.5/6.6	6.5/9.0	Standard/Standard	No Exceedance
G54L	PMP	E005	Radium 226 + Radium 228, total	pCi/L	04/14/21 - 04/23/24	13	0	CI around mean	0.351	5	Standard	No Exceedance
G54L	PMP	E005	Selenium, total	mg/L	04/14/21 - 04/23/24	13	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G54L	PMP	E005	Sulfate, total	mg/L	04/14/21 - 04/23/24	14	0	CB around linear reg	96.5	400	Standard	No Exceedance
G54L	PMP	E005	Thallium, total	mg/L	04/14/21 - 04/23/24	13	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G54L	PMP	E005	Total Dissolved Solids	mg/L	04/14/21 - 04/30/24	20	0	CB around linear reg	756	1,200	Standard	No Exceedance
G54S	UA	E005	Antimony, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G54S	UA	E005	Arsenic, total	mg/L	12/04/15 - 04/24/24	13	23	CI around median	0.001	0.010	Standard	No Exceedance
G54S	UA	E005	Barium, total	mg/L	12/04/15 - 04/24/24	13	0	CI around mean	0.209	2.0	Standard	No Exceedance
G54S	UA	E005	Beryllium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G54S	UA	E005	Boron, total	mg/L	12/04/15 - 04/24/24	27	0	CI around mean	0.0326	2	Standard	No Exceedance
G54S	UA	E005	Cadmium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G54S	UA	E005	Chloride, total	mg/L	12/04/15 - 04/24/24	25	10	CI around geomean	2.1	200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G54S	UA	E005	Chromium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.004	0.1	Standard	No Exceedance
G54S	UA	E005	Cobalt, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.002	0.006	Standard	No Exceedance
G54S	UA	E005	Fluoride, total	mg/L	12/04/15 - 04/24/24	26	78	CI around median	0.25	4.0	Standard	No Exceedance
G54S	UA	E005	Lead, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.0150	Background	No Exceedance
G54S	UA	E005	Lithium, total	mg/L	12/04/15 - 04/24/24	13	77	CB around T-S line	0.01	0.04	Standard	No Exceedance
G54S	UA	E005	Mercury, total	mg/L	12/04/15 - 04/24/24	13	86	CI around median	0.0002	0.002	Standard	No Exceedance
G54S	UA	E005	Molybdenum, total	mg/L	12/04/15 - 04/24/24	13	0	CI around mean	0.00136	0.1	Standard	No Exceedance
G54S	UA	E005	pH (field)	SU	12/04/15 - 04/24/24	35	0	CB around linear reg	6.5/6.9	6.5/9.0	Standard/Standard	No Exceedance
G54S	UA	E005	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 04/24/24	13	0	CI around geomean	0.427	5	Standard	No Exceedance
G54S	UA	E005	Selenium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G54S	UA	E005	Sulfate, total	mg/L	12/04/15 - 04/24/24	25	0	CB around T-S line	30.8	400	Standard	No Exceedance
G54S	UA	E005	Thallium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G54S	UA	E005	Total Dissolved Solids	mg/L	12/04/15 - 04/24/24	33	0	CI around mean	518	1,200	Standard	No Exceedance
G57S	UA	E005	Antimony, total	mg/L	12/04/15 - 04/24/24	13	93	CI around median	0.003	0.006	Standard	No Exceedance
G57S	UA	E005	Arsenic, total	mg/L	12/04/15 - 04/24/24	13	91	Most recent sample	0.001	0.010	Standard	No Exceedance
G57S	UA	E005	Barium, total	mg/L	12/04/15 - 04/24/24	13	0	CB around linear reg	0.172	2.0	Standard	No Exceedance
G57S	UA	E005	Beryllium, total	mg/L	12/04/15 - 04/24/24	13	93	CI around median	0.001	0.004	Standard	No Exceedance
G57S	UA	E005	Boron, total	mg/L	12/04/15 - 04/24/24	26	43	CI around median	0.01	2	Standard	No Exceedance
G57S	UA	E005	Cadmium, total	mg/L	12/04/15 - 04/24/24	13	92	CI around median	0.001	0.005	Standard	No Exceedance
G57S	UA	E005	Chloride, total	mg/L	12/04/15 - 04/24/24	26	2	CI around median	18	200	Standard	No Exceedance
G57S	UA	E005	Chromium, total	mg/L	12/04/15 - 04/24/24	13	93	Most recent sample	0.004	0.1	Standard	No Exceedance
G57S	UA	E005	Cobalt, total	mg/L	12/04/15 - 04/24/24	13	93	Most recent sample	0.002	0.006	Standard	No Exceedance
G57S	UA	E005	Fluoride, total	mg/L	12/04/15 - 04/24/24	27	36	CI around median	0.25	4.0	Standard	No Exceedance
G57S	UA	E005	Lead, total	mg/L	12/04/15 - 04/24/24	13	77	CI around median	0.001	0.0150	Background	No Exceedance
G57S	UA	E005	Lithium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G57S	UA	E005	Mercury, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G57S	UA	E005	Molybdenum, total	mg/L	12/04/15 - 04/24/24	13	92	CI around median	0.001	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G57S	UA	E005	pH (field)	SU	12/04/15 - 04/24/24	33	0	CB around linear reg	6.5/6.8	6.5/9.0	Standard/Standard	No Exceedance
G57S	UA	E005	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 04/24/24	13	0	CI around mean	0.229	5	Standard	No Exceedance
G57S	UA	E005	Selenium, total	mg/L	12/04/15 - 04/24/24	13	93	Most recent sample	0.001	0.05	Standard	No Exceedance
G57S	UA	E005	Sulfate, total	mg/L	12/04/15 - 04/24/24	25	0	CB around linear reg	46.3	400	Standard	No Exceedance
G57S	UA	E005	Thallium, total	mg/L	12/04/15 - 04/24/24	13	93	CI around median	0.001	0.002	Standard	No Exceedance
G57S	UA	E005	Total Dissolved Solids	mg/L	12/04/15 - 04/24/24	33	0	CB around linear reg	792	1,200	Standard	No Exceedance
G60L	PMP	E005	Antimony, total	mg/L	04/14/21 - 04/24/24	13	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G60L	PMP	E005	Arsenic, total	mg/L	04/14/21 - 04/24/24	13	92	CI around median	0.001	0.010	Standard	No Exceedance
G60L	PMP	E005	Barium, total	mg/L	04/14/21 - 04/24/24	13	0	CB around T-S line	0.0194	2.0	Standard	No Exceedance
G60L	PMP	E005	Beryllium, total	mg/L	04/14/21 - 04/24/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G60L	PMP	E005	Boron, total	mg/L	04/14/21 - 04/24/24	14	0	CI around geomean	0.0254	2	Standard	No Exceedance
G60L	PMP	E005	Cadmium, total	mg/L	04/14/21 - 04/24/24	13	92	CI around median	0.001	0.005	Standard	No Exceedance
G60L	PMP	E005	Chloride, total	mg/L	04/14/21 - 04/24/24	14	0	CB around linear reg	6.99	200	Standard	No Exceedance
G60L	PMP	E005	Chromium, total	mg/L	04/14/21 - 04/24/24	13	92	CI around median	0.004	0.1	Standard	No Exceedance
G60L	PMP	E005	Cobalt, total	mg/L	04/14/21 - 04/24/24	13	15	CI around geomean	0.00263	0.006	Standard	No Exceedance
G60L	PMP	E005	Fluoride, total	mg/L	04/14/21 - 04/24/24	14	100	All ND - Last	0.25	4.0	Standard	No Exceedance
G60L	PMP	E005	Lead, total	mg/L	04/14/21 - 04/24/24	13	92	CI around median	0.001	0.0150	Background	No Exceedance
G60L	PMP	E005	Lithium, total	mg/L	04/14/21 - 04/24/24	13	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G60L	PMP	E005	Mercury, total	mg/L	04/14/21 - 04/24/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G60L	PMP	E005	Molybdenum, total	mg/L	04/14/21 - 04/24/24	13	100	All ND - Last	0.001	0.1	Standard	No Exceedance
G60L	PMP	E005	pH (field)	SU	04/14/21 - 04/24/24	20	0	CI around mean	6.0/6.2	6.5/9.0	Standard/Standard	Exceedance
G60L	PMP	E005	Radium 226 + Radium 228, total	pCi/L	04/14/21 - 04/24/24	13	0	CI around mean	0.238	5	Standard	No Exceedance
G60L	PMP	E005	Selenium, total	mg/L	04/14/21 - 04/24/24	13	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G60L	PMP	E005	Sulfate, total	mg/L	04/14/21 - 04/24/24	14	7	CI around mean	155	400	Standard	No Exceedance
G60L	PMP	E005	Thallium, total	mg/L	04/14/21 - 04/24/24	13	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G60L	PMP	E005	Total Dissolved Solids	mg/L	04/14/21 - 04/24/24	20	0	CI around mean	544	1,200	Standard	No Exceedance
G60S	UA	E005	Antimony, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.003	0.006	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G60S	UA	E005	Arsenic, total	mg/L	12/04/15 - 04/24/24	13	14	CI around mean	0.00123	0.010	Standard	No Exceedance
G60S	UA	E005	Barium, total	mg/L	12/04/15 - 04/24/24	13	0	CI around mean	0.146	2.0	Standard	No Exceedance
G60S	UA	E005	Beryllium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G60S	UA	E005	Boron, total	mg/L	12/04/15 - 04/24/24	28	8	CB around T-S line	0.0264	2	Standard	No Exceedance
G60S	UA	E005	Cadmium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G60S	UA	E005	Chloride, total	mg/L	12/04/15 - 04/24/24	26	2	CI around geomean	7.59	200	Standard	No Exceedance
G60S	UA	E005	Chromium, total	mg/L	12/04/15 - 04/24/24	13	46	CI around median	0.004	0.1	Standard	No Exceedance
G60S	UA	E005	Cobalt, total	mg/L	12/04/15 - 04/24/24	13	69	CI around median	0.002	0.006	Standard	No Exceedance
G60S	UA	E005	Fluoride, total	mg/L	12/04/15 - 04/24/24	27	48	CI around median	0.25	4.0	Standard	No Exceedance
G60S	UA	E005	Lead, total	mg/L	12/04/15 - 04/24/24	13	29	CI around geomean	0.00125	0.0150	Background	No Exceedance
G60S	UA	E005	Lithium, total	mg/L	12/04/15 - 04/24/24	13	77	CB around T-S line	0.01	0.04	Standard	No Exceedance
G60S	UA	E005	Mercury, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G60S	UA	E005	Molybdenum, total	mg/L	12/04/15 - 04/24/24	13	46	CI around median	0.001	0.1	Standard	No Exceedance
G60S	UA	E005	pH (field)	SU	12/04/15 - 04/24/24	34	0	CI around mean	6.7/6.8	6.5/9.0	Standard/Standard	No Exceedance
G60S	UA	E005	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 04/24/24	13	0	CI around geomean	0.726	5	Standard	No Exceedance
G60S	UA	E005	Selenium, total	mg/L	12/04/15 - 04/24/24	13	85	CI around median	0.001	0.05	Standard	No Exceedance
G60S	UA	E005	Sulfate, total	mg/L	12/04/15 - 04/24/24	27	0	CB around T-S line	69.6	400	Standard	No Exceedance
G60S	UA	E005	Thallium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G60S	UA	E005	Total Dissolved Solids	mg/L	12/04/15 - 04/24/24	34	0	CI around median	560	1,200	Standard	No Exceedance
G64L	PMP	E005	Antimony, total	mg/L	05/15/23 - 04/22/24	5	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G64L	PMP	E005	Arsenic, total	mg/L	05/15/23 - 04/22/24	5	46	CI around mean	0.000176	0.010	Standard	No Exceedance
G64L	PMP	E005	Barium, total	mg/L	05/15/23 - 04/22/24	5	0	CI around mean	0.0861	2.0	Standard	No Exceedance
G64L	PMP	E005	Beryllium, total	mg/L	05/15/23 - 04/22/24	5	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G64L	PMP	E005	Boron, total	mg/L	01/11/23 - 04/22/24	6	25	CI around mean	0.0054	2	Standard	No Exceedance
G64L	PMP	E005	Cadmium, total	mg/L	05/15/23 - 04/22/24	5	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G64L	PMP	E005	Chloride, total	mg/L	01/11/23 - 04/22/24	6	8	CI around mean	1.93	200	Standard	No Exceedance
G64L	PMP	E005	Chromium, total	mg/L	05/15/23 - 04/22/24	5	60	CI around median (Last Sample, n<7)	0.004	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G64L	PMP	E005	Cobalt, total	mg/L	05/15/23 - 04/22/24	5	100	All ND - Last	0.002	0.006	Standard	No Exceedance
G64L	PMP	E005	Fluoride, total	mg/L	01/11/23 - 04/22/24	6	33	CI around mean	0.212	4.0	Standard	No Exceedance
G64L	PMP	E005	Lead, total	mg/L	05/15/23 - 04/22/24	5	46	CI around mean	0.00014	0.0150	Background	No Exceedance
G64L	PMP	E005	Lithium, total	mg/L	05/15/23 - 04/22/24	5	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G64L	PMP	E005	Mercury, total	mg/L	05/15/23 - 04/22/24	5	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G64L	PMP	E005	Molybdenum, total	mg/L	05/15/23 - 04/22/24	5	40	CI around mean	0.000864	0.1	Standard	No Exceedance
G64L	PMP	E005	pH (field)	SU	05/21/21 - 04/22/24	13	0	CI around mean	6.8/7.2	6.5/9.0	Standard/Standard	No Exceedance
G64L	PMP	E005	Radium 226 + Radium 228, total	pCi/L	05/15/23 - 04/22/24	5	0	CI around mean	0.362	5	Standard	No Exceedance
G64L	PMP	E005	Selenium, total	mg/L	05/15/23 - 04/22/24	5	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G64L	PMP	E005	Sulfate, total	mg/L	01/11/23 - 04/22/24	6	0	CI around mean	7.01	400	Standard	No Exceedance
G64L	PMP	E005	Thallium, total	mg/L	05/15/23 - 04/22/24	5	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G64L	PMP	E005	Total Dissolved Solids	mg/L	05/21/21 - 04/22/24	13	0	CI around mean	550	1,200	Standard	No Exceedance
G64S	UA	E005	Antimony, total	mg/L	12/04/15 - 04/24/24	13	93	CI around median	0.003	0.006	Standard	No Exceedance
G64S	UA	E005	Arsenic, total	mg/L	12/04/15 - 04/24/24	13	14	CB around linear reg	-0.000539	0.010	Standard	No Exceedance
G64S	UA	E005	Barium, total	mg/L	12/04/15 - 04/24/24	13	0	CI around mean	0.161	2.0	Standard	No Exceedance
G64S	UA	E005	Beryllium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G64S	UA	E005	Boron, total	mg/L	12/04/15 - 04/24/24	26	3	CI around geomean	0.015	2	Standard	No Exceedance
G64S	UA	E005	Cadmium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G64S	UA	E005	Chloride, total	mg/L	12/04/15 - 04/24/24	25	4	CI around geomean	3.22	200	Standard	No Exceedance
G64S	UA	E005	Chromium, total	mg/L	12/04/15 - 04/24/24	13	93	CI around median	0.004	0.1	Standard	No Exceedance
G64S	UA	E005	Cobalt, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.002	0.006	Standard	No Exceedance
G64S	UA	E005	Fluoride, total	mg/L	12/04/15 - 04/24/24	27	18	CI around mean	0.292	4.0	Standard	No Exceedance
G64S	UA	E005	Lead, total	mg/L	12/04/15 - 04/24/24	13	46	CB around linear reg	-0.000819	0.0150	Background	No Exceedance
G64S	UA	E005	Lithium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G64S	UA	E005	Mercury, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G64S	UA	E005	Molybdenum, total	mg/L	12/04/15 - 04/24/24	13	15	CI around mean	0.00106	0.1	Standard	No Exceedance
G64S	UA	E005	pH (field)	SU	12/04/15 - 04/24/24	34	0	CI around median	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G64S	UA	E005	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 04/24/24	13	0	CI around mean	0.529	5	Standard	No Exceedance
G64S	UA	E005	Selenium, total	mg/L	12/04/15 - 04/24/24	13	93	CI around median	0.001	0.05	Standard	No Exceedance
G64S	UA	E005	Sulfate, total	mg/L	12/04/15 - 04/24/24	25	0	CB around linear reg	20.2	400	Standard	No Exceedance
G64S	UA	E005	Thallium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G64S	UA	E005	Total Dissolved Solids	mg/L	12/04/15 - 04/24/24	32	0	CI around median	420	1,200	Standard	No Exceedance

Notes:
Compliance Result:

No Exceedance: the statistical result did not exceed the GWPS.

Exceedance: The statistical result exceeded the GWPS.

HSU = hydrostratigraphic unit:

PMP = Potential Migration Pathway

UA = Uppermost Aquifer

mg/L = milligrams per liter
ND = non-detect
pCi/L = picocuries per liter
SU = standard units
Sample Count = number of samples from Sampled Date Range used to calculate the Statistical Result
Statistical Calculation = method used to calculate the statistical result:

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

CB around T-S line = Confidence band around Thiel-Sen line

CB around linear reg = Confidence band around linear regression

CI around geomean = Confidence interval around the geometric mean

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

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

Statistical Result = calculated in accordance with the Statistical Analysis Plan using constituent concentrations observed at each monitoring well during all sampling events within the specified date range
For pH, the values presented are the lower / upper limits
GWPS = Groundwater Protection Standard
GWPS Source:

Standard = standard specified in 35 I.A.C. § 845.600(a)(1)

Background = background concentration (see cover page for additional information)

TABLE 2.
EVALUATION OF COMPLIANCE- QUARTER 3, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G54L	PMP	E006	Antimony, total	mg/L	04/14/21 - 07/29/24	14	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G54L	PMP	E006	Arsenic, total	mg/L	04/14/21 - 07/29/24	14	0	CB around linear reg	-0.00353	0.010	Standard	No Exceedance
G54L	PMP	E006	Barium, total	mg/L	04/14/21 - 07/29/24	14	0	CI around mean	0.171	2.0	Standard	No Exceedance
G54L	PMP	E006	Beryllium, total	mg/L	04/14/21 - 07/29/24	14	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G54L	PMP	E006	Boron, total	mg/L	04/14/21 - 07/29/24	15	12	CI around geomean	0.0128	2	Standard	No Exceedance
G54L	PMP	E006	Cadmium, total	mg/L	04/14/21 - 07/29/24	14	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G54L	PMP	E006	Chloride, total	mg/L	04/14/21 - 07/29/24	15	0	CB around linear reg	42.9	200	Standard	No Exceedance
G54L	PMP	E006	Chromium, total	mg/L	04/14/21 - 07/29/24	14	93	CI around median	0.004	0.1	Standard	No Exceedance
G54L	PMP	E006	Cobalt, total	mg/L	04/14/21 - 07/29/24	14	57	CB around T-S line	-0.00542	0.006	Standard	No Exceedance
G54L	PMP	E006	Fluoride, total	mg/L	04/14/21 - 07/29/24	15	87	CI around median	0.25	4.0	Standard	No Exceedance
G54L	PMP	E006	Lead, total	mg/L	04/14/21 - 07/29/24	14	88	Most recent sample	0.001	0.0150	Background	No Exceedance
G54L	PMP	E006	Lithium, total	mg/L	04/14/21 - 07/29/24	14	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G54L	PMP	E006	Mercury, total	mg/L	04/14/21 - 07/29/24	14	93	CI around median	0.0002	0.002	Standard	No Exceedance
G54L	PMP	E006	Molybdenum, total	mg/L	04/14/21 - 07/29/24	14	57	CI around median	0.001	0.1	Standard	No Exceedance
G54L	PMP	E006	pH (field)	SU	04/14/21 - 07/29/24	21	0	CI around median	6.5/6.6	6.5/9.0	Standard/Standard	No Exceedance
G54L	PMP	E006	Radium 226 + Radium 228, total	pCi/L	04/14/21 - 07/29/24	14	0	CI around mean	0.353	5	Standard	No Exceedance
G54L	PMP	E006	Selenium, total	mg/L	04/14/21 - 07/29/24	14	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G54L	PMP	E006	Sulfate, total	mg/L	04/14/21 - 07/29/24	15	0	CB around linear reg	101	400	Standard	No Exceedance
G54L	PMP	E006	Thallium, total	mg/L	04/14/21 - 07/29/24	14	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G54L	PMP	E006	Total Dissolved Solids	mg/L	04/14/21 - 07/29/24	21	0	CB around linear reg	781	1,200	Standard	No Exceedance
G54S	UA	E006	Antimony, total	mg/L	12/04/15 - 07/29/24	14	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G54S	UA	E006	Arsenic, total	mg/L	12/04/15 - 07/29/24	14	22	CI around median	0.001	0.010	Standard	No Exceedance
G54S	UA	E006	Barium, total	mg/L	12/04/15 - 07/29/24	14	0	CI around mean	0.212	2.0	Standard	No Exceedance
G54S	UA	E006	Beryllium, total	mg/L	12/04/15 - 07/29/24	14	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G54S	UA	E006	Boron, total	mg/L	12/04/15 - 07/29/24	28	0	CI around mean	0.0315	2	Standard	No Exceedance
G54S	UA	E006	Cadmium, total	mg/L	12/04/15 - 07/29/24	14	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G54S	UA	E006	Chloride, total	mg/L	12/04/15 - 07/29/24	26	10	CI around geomean	2.15	200	Standard	No Exceedance

TABLE 2.
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DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G54S	UA	E006	Chromium, total	mg/L	12/04/15 - 07/29/24	14	100	All ND - Last	0.004	0.1	Standard	No Exceedance
G54S	UA	E006	Cobalt, total	mg/L	12/04/15 - 07/29/24	14	100	All ND - Last	0.002	0.006	Standard	No Exceedance
G54S	UA	E006	Fluoride, total	mg/L	12/04/15 - 07/29/24	27	79	CI around median	0.25	4.0	Standard	No Exceedance
G54S	UA	E006	Lead, total	mg/L	12/04/15 - 07/29/24	14	96	CI around median	0.001	0.0150	Background	No Exceedance
G54S	UA	E006	Lithium, total	mg/L	12/04/15 - 07/29/24	14	79	CB around T-S line	0.01	0.04	Standard	No Exceedance
G54S	UA	E006	Mercury, total	mg/L	12/04/15 - 07/29/24	14	87	CI around median	0.0002	0.002	Standard	No Exceedance
G54S	UA	E006	Molybdenum, total	mg/L	12/04/15 - 07/29/24	14	7	CB around linear reg	0.000618	0.1	Standard	No Exceedance
G54S	UA	E006	pH (field)	SU	12/04/15 - 07/29/24	36	0	CB around linear reg	6.5/6.9	6.5/9.0	Standard/Standard	No Exceedance
G54S	UA	E006	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 07/29/24	14	0	CI around geomean	0.468	5	Standard	No Exceedance
G54S	UA	E006	Selenium, total	mg/L	12/04/15 - 07/29/24	14	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G54S	UA	E006	Sulfate, total	mg/L	12/04/15 - 07/29/24	26	0	CB around T-S line	30.9	400	Standard	No Exceedance
G54S	UA	E006	Thallium, total	mg/L	12/04/15 - 07/29/24	14	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G54S	UA	E006	Total Dissolved Solids	mg/L	12/04/15 - 07/29/24	34	0	CI around mean	517	1,200	Standard	No Exceedance
G57S	UA	E006	Antimony, total	mg/L	12/04/15 - 07/23/24	14	93	CI around median	0.003	0.006	Standard	No Exceedance
G57S	UA	E006	Arsenic, total	mg/L	12/04/15 - 07/23/24	14	91	Most recent sample	0.001	0.010	Standard	No Exceedance
G57S	UA	E006	Barium, total	mg/L	12/04/15 - 07/23/24	14	0	CB around linear reg	0.176	2.0	Standard	No Exceedance
G57S	UA	E006	Beryllium, total	mg/L	12/04/15 - 07/23/24	14	93	CI around median	0.001	0.004	Standard	No Exceedance
G57S	UA	E006	Boron, total	mg/L	12/04/15 - 07/23/24	27	44	CI around median	0.01	2	Standard	No Exceedance
G57S	UA	E006	Cadmium, total	mg/L	12/04/15 - 07/23/24	14	93	CI around median	0.001	0.005	Standard	No Exceedance
G57S	UA	E006	Chloride, total	mg/L	12/04/15 - 07/23/24	27	2	CI around median	18	200	Standard	No Exceedance
G57S	UA	E006	Chromium, total	mg/L	12/04/15 - 07/23/24	14	93	Most recent sample	0.004	0.1	Standard	No Exceedance
G57S	UA	E006	Cobalt, total	mg/L	12/04/15 - 07/23/24	14	93	Most recent sample	0.002	0.006	Standard	No Exceedance
G57S	UA	E006	Fluoride, total	mg/L	12/04/15 - 07/23/24	28	38	CI around median	0.25	4.0	Standard	No Exceedance
G57S	UA	E006	Lead, total	mg/L	12/04/15 - 07/23/24	14	78	CI around median	0.001	0.0150	Background	No Exceedance
G57S	UA	E006	Lithium, total	mg/L	12/04/15 - 07/23/24	14	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G57S	UA	E006	Mercury, total	mg/L	12/04/15 - 07/23/24	14	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G57S	UA	E006	Molybdenum, total	mg/L	12/04/15 - 07/23/24	14	93	CI around median	0.001	0.1	Standard	No Exceedance

TABLE 2.
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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G57S	UA	E006	pH (field)	SU	12/04/15 - 07/23/24	34	0	CB around linear reg	6.5/6.8	6.5/9.0	Standard/Standard	No Exceedance
G57S	UA	E006	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 07/23/24	14	0	CI around mean	0.218	5	Standard	No Exceedance
G57S	UA	E006	Selenium, total	mg/L	12/04/15 - 07/23/24	14	93	Most recent sample	0.001	0.05	Standard	No Exceedance
G57S	UA	E006	Sulfate, total	mg/L	12/04/15 - 07/23/24	26	0	CB around linear reg	46.2	400	Standard	No Exceedance
G57S	UA	E006	Thallium, total	mg/L	12/04/15 - 07/23/24	14	93	CI around median	0.001	0.002	Standard	No Exceedance
G57S	UA	E006	Total Dissolved Solids	mg/L	12/04/15 - 07/23/24	34	0	CB around linear reg	803	1,200	Standard	No Exceedance
G60L	PMP	E006	Antimony, total	mg/L	04/14/21 - 07/31/24	14	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G60L	PMP	E006	Arsenic, total	mg/L	04/14/21 - 07/31/24	14	93	CI around median	0.001	0.010	Standard	No Exceedance
G60L	PMP	E006	Barium, total	mg/L	04/14/21 - 07/31/24	14	0	CB around linear reg	0.0272	2.0	Standard	No Exceedance
G60L	PMP	E006	Beryllium, total	mg/L	04/14/21 - 07/31/24	14	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G60L	PMP	E006	Boron, total	mg/L	04/14/21 - 07/31/24	15	0	CI around geomean	0.0259	2	Standard	No Exceedance
G60L	PMP	E006	Cadmium, total	mg/L	04/14/21 - 07/31/24	14	93	CI around median	0.001	0.005	Standard	No Exceedance
G60L	PMP	E006	Chloride, total	mg/L	04/14/21 - 07/31/24	15	0	CB around linear reg	6.06	200	Standard	No Exceedance
G60L	PMP	E006	Chromium, total	mg/L	04/14/21 - 07/31/24	14	86	CI around median	0.004	0.1	Standard	No Exceedance
G60L	PMP	E006	Cobalt, total	mg/L	04/14/21 - 07/31/24	14	14	CB around linear reg	0.00643	0.006	Standard	Exceedance Not Confirmed
G60L	PMP	E006R	Cobalt, total	mg/L	04/14/21 - 09/12/24	15	13	CB around linear reg	0.00419	0.006	Standard	No Exceedance
G60L	PMP	E006	Fluoride, total	mg/L	04/14/21 - 07/31/24	15	100	All ND - Last	0.25	4.0	Standard	No Exceedance
G60L	PMP	E006	Lead, total	mg/L	04/14/21 - 07/31/24	14	86	CI around median	0.001	0.0150	Background	No Exceedance
G60L	PMP	E006	Lithium, total	mg/L	04/14/21 - 07/31/24	14	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G60L	PMP	E006	Mercury, total	mg/L	04/14/21 - 07/31/24	14	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G60L	PMP	E006	Molybdenum, total	mg/L	04/14/21 - 07/31/24	14	100	All ND - Last	0.001	0.1	Standard	No Exceedance
G60L	PMP	E006	pH (field)	SU	04/14/21 - 07/31/24	21	0	CI around mean	6.0/6.2	6.5/9.0	Standard/Standard	Exceedance
G60L	PMP	E006R	pH (field)	SU	04/14/21 - 09/12/24	22	0	CI around mean	6.0/6.2	6.5/9.0	Standard/Standard	Exceedance
G60L	PMP	E006	Radium 226 + Radium 228, total	pCi/L	04/14/21 - 07/31/24	14	0	CI around mean	0.31	5	Standard	No Exceedance
G60L	PMP	E006	Selenium, total	mg/L	04/14/21 - 07/31/24	14	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G60L	PMP	E006	Sulfate, total	mg/L	04/14/21 - 07/31/24	15	7	CI around mean	154	400	Standard	No Exceedance

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G60L	PMP	E006	Thallium, total	mg/L	04/14/21 - 07/31/24	14	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G60L	PMP	E006	Total Dissolved Solids	mg/L	04/14/21 - 07/31/24	21	0	CI around mean	545	1,200	Standard	No Exceedance
G60S	UA	E006	Antimony, total	mg/L	12/04/15 - 07/23/24	14	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G60S	UA	E006	Arsenic, total	mg/L	12/04/15 - 07/23/24	14	14	CI around geomean	0.00117	0.010	Standard	No Exceedance
G60S	UA	E006	Barium, total	mg/L	12/04/15 - 07/23/24	14	0	CI around mean	0.146	2.0	Standard	No Exceedance
G60S	UA	E006	Beryllium, total	mg/L	12/04/15 - 07/23/24	14	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G60S	UA	E006	Boron, total	mg/L	12/04/15 - 07/23/24	29	8	CI around geomean	0.0168	2	Standard	No Exceedance
G60S	UA	E006	Cadmium, total	mg/L	12/04/15 - 07/23/24	14	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G60S	UA	E006	Chloride, total	mg/L	12/04/15 - 07/23/24	27	2	CB around T-S line	4.39	200	Standard	No Exceedance
G60S	UA	E006	Chromium, total	mg/L	12/04/15 - 07/23/24	14	50	CI around median	0.004	0.1	Standard	No Exceedance
G60S	UA	E006	Cobalt, total	mg/L	12/04/15 - 07/23/24	14	71	CI around median	0.002	0.006	Standard	No Exceedance
G60S	UA	E006	Fluoride, total	mg/L	12/04/15 - 07/23/24	28	50	CI around median	0.25	4.0	Standard	No Exceedance
G60S	UA	E006	Lead, total	mg/L	12/04/15 - 07/23/24	14	32	CI around median	0.001	0.0150	Background	No Exceedance
G60S	UA	E006	Lithium, total	mg/L	12/04/15 - 07/23/24	14	79	CB around T-S line	0.01	0.04	Standard	No Exceedance
G60S	UA	E006	Mercury, total	mg/L	12/04/15 - 07/23/24	14	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G60S	UA	E006	Molybdenum, total	mg/L	12/04/15 - 07/23/24	14	43	CI around median	0.001	0.1	Standard	No Exceedance
G60S	UA	E006	pH (field)	SU	12/04/15 - 07/23/24	35	0	CI around mean	6.7/6.8	6.5/9.0	Standard/Standard	No Exceedance
G60S	UA	E006	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 07/23/24	14	0	CI around geomean	0.767	5	Standard	No Exceedance
G60S	UA	E006	Selenium, total	mg/L	12/04/15 - 07/23/24	14	86	CI around median	0.001	0.05	Standard	No Exceedance
G60S	UA	E006	Sulfate, total	mg/L	12/04/15 - 07/23/24	28	0	CI around median	67	400	Standard	No Exceedance
G60S	UA	E006	Thallium, total	mg/L	12/04/15 - 07/23/24	14	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G60S	UA	E006	Total Dissolved Solids	mg/L	12/04/15 - 07/23/24	35	0	CI around median	560	1,200	Standard	No Exceedance
G64L	PMP	E006	Antimony, total	mg/L	05/15/23 - 07/31/24	6	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G64L	PMP	E006	Arsenic, total	mg/L	05/15/23 - 07/31/24	6	50	CI around median (Last Sample, n<7)	0.001	0.010	Standard	No Exceedance
G64L	PMP	E006	Barium, total	mg/L	05/15/23 - 07/31/24	6	0	CI around mean	0.0887	2.0	Standard	No Exceedance
G64L	PMP	E006	Beryllium, total	mg/L	05/15/23 - 07/31/24	6	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G64L	PMP	E006	Boron, total	mg/L	01/11/23 - 07/31/24	7	23	CI around mean	0.0043	2	Standard	No Exceedance

TABLE 2.
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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G64L	PMP	E006	Cadmium, total	mg/L	05/15/23 - 07/31/24	6	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G64L	PMP	E006	Chloride, total	mg/L	01/11/23 - 07/31/24	7	8	CI around mean	1.92	200	Standard	No Exceedance
G64L	PMP	E006	Chromium, total	mg/L	05/15/23 - 07/31/24	6	67	CI around median (Last Sample, n<7)	0.004	0.1	Standard	No Exceedance
G64L	PMP	E006	Cobalt, total	mg/L	05/15/23 - 07/31/24	6	100	All ND - Last	0.002	0.006	Standard	No Exceedance
G64L	PMP	E006	Fluoride, total	mg/L	01/11/23 - 07/31/24	7	43	CI around geomean	0.232	4.0	Standard	No Exceedance
G64L	PMP	E006	Lead, total	mg/L	05/15/23 - 07/31/24	6	50	CI around median (Last Sample, n<7)	0.001	0.0150	Background	No Exceedance
G64L	PMP	E006	Lithium, total	mg/L	05/15/23 - 07/31/24	6	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G64L	PMP	E006	Mercury, total	mg/L	05/15/23 - 07/31/24	6	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G64L	PMP	E006	Molybdenum, total	mg/L	05/15/23 - 07/31/24	6	33	CI around mean	0.000891	0.1	Standard	No Exceedance
G64L	PMP	E006	pH (field)	SU	05/21/21 - 07/31/24	14	0	CI around mean	6.8/7.1	6.5/9.0	Standard/Standard	No Exceedance
G64L	PMP	E006	Radium 226 + Radium 228, total	pCi/L	05/15/23 - 07/31/24	6	0	CI around mean	0.167	5	Standard	No Exceedance
G64L	PMP	E006	Selenium, total	mg/L	05/15/23 - 07/31/24	6	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G64L	PMP	E006	Sulfate, total	mg/L	01/11/23 - 07/31/24	7	0	CI around mean	17.4	400	Standard	No Exceedance
G64L	PMP	E006	Thallium, total	mg/L	05/15/23 - 07/31/24	6	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G64L	PMP	E006	Total Dissolved Solids	mg/L	05/21/21 - 07/31/24	14	0	CI around mean	556	1,200	Standard	No Exceedance
G64S	UA	E006	Antimony, total	mg/L	12/04/15 - 08/01/24	14	93	CI around median	0.003	0.006	Standard	No Exceedance
G64S	UA	E006	Arsenic, total	mg/L	12/04/15 - 08/01/24	14	13	CB around linear reg	-0.000373	0.010	Standard	No Exceedance
G64S	UA	E006	Barium, total	mg/L	12/04/15 - 08/01/24	14	0	CI around mean	0.162	2.0	Standard	No Exceedance
G64S	UA	E006	Beryllium, total	mg/L	12/04/15 - 08/01/24	14	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G64S	UA	E006	Boron, total	mg/L	12/04/15 - 08/01/24	27	3	CI around geomean	0.0151	2	Standard	No Exceedance
G64S	UA	E006	Cadmium, total	mg/L	12/04/15 - 08/01/24	14	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G64S	UA	E006	Chloride, total	mg/L	12/04/15 - 08/01/24	26	4	CB around T-S line	2.55	200	Standard	No Exceedance
G64S	UA	E006	Chromium, total	mg/L	12/04/15 - 08/01/24	14	93	CI around median	0.004	0.1	Standard	No Exceedance
G64S	UA	E006	Cobalt, total	mg/L	12/04/15 - 08/01/24	14	100	All ND - Last	0.002	0.006	Standard	No Exceedance
G64S	UA	E006	Fluoride, total	mg/L	12/04/15 - 08/01/24	28	21	CI around mean	0.289	4.0	Standard	No Exceedance
G64S	UA	E006	Lead, total	mg/L	12/04/15 - 08/01/24	14	48	CB around linear reg	-0.000624	0.0150	Background	No Exceedance
G64S	UA	E006	Lithium, total	mg/L	12/04/15 - 08/01/24	14	100	All ND - Last	0.02	0.04	Standard	No Exceedance

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G64S	UA	E006	Mercury, total	mg/L	12/04/15 - 08/01/24	14	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G64S	UA	E006	Molybdenum, total	mg/L	12/04/15 - 08/01/24	14	14	CI around mean	0.00109	0.1	Standard	No Exceedance
G64S	UA	E006	pH (field)	SU	12/04/15 - 08/01/24	35	0	CI around median	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance
G64S	UA	E006	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 08/01/24	14	0	CI around mean	0.52	5	Standard	No Exceedance
G64S	UA	E006	Selenium, total	mg/L	12/04/15 - 08/01/24	14	93	CI around median	0.001	0.05	Standard	No Exceedance
G64S	UA	E006	Sulfate, total	mg/L	12/04/15 - 08/01/24	26	0	CB around linear reg	20.3	400	Standard	No Exceedance
G64S	UA	E006	Thallium, total	mg/L	12/04/15 - 08/01/24	14	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G64S	UA	E006	Total Dissolved Solids	mg/L	12/04/15 - 08/01/24	33	0	CI around median	420	1,200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE- QUARTER 3, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Notes:
Compliance Result:
- No Exceedance: the statistical result did not exceed the GWPS.
- Exceedance: The statistical result exceeded the GWPS.

HSU = hydrostratigraphic unit:
- PMP = Potential Migration Pathway
- UA = Uppermost Aquifer

mg/L = milligrams per liter
Missing Code (if applicable):
- NR[1] = Select parameters were not analyzed.
- NS[1] = This well has been, or will be, abandoned; therefore, a sample was not collected.
- NS[2] = Well either needs or was undergoing maintenance, therefore, a sample was not collected.
- NS[3] = A sample was not collected because the location was inaccessible.
- NS[4] = The location could not be found, therefore a sample was not collected.
- NS[5] = A sample was not collected because of damage to the well.
- NS[6] = A sample was not collected because of pump issues.
- NS[7] = A sample was not collected because the well was either dry or was purged dry and did not recover.
- NS[8] = A sample was not collected.
- PM[1] = Select parameters were not analyzed as the well purged dry during sample collection and did not sufficiently recover to sample for all parameters.

ND = non-detect
pCi/L = picocuries per liter
R = resample
SU = standard units
Sample Count = number of samples from Sampled Date Range used to calculate the Statistical Result
Statistical Calculation = method used to calculate the statistical result:
- All ND - Last = All results were below the reporting limit, and the last determined reporting limit is shown
- CB around T-S line = Confidence band around Thiel-Sen line
- CB around linear reg = Confidence band around linear regression
- CI around geomean = Confidence interval around the geometric mean
- CI around mean = Confidence interval around the mean
- CI around median = Confidence interval around the median
- Most recent sample = Result for the most recently collected sample used due to insufficient data

Statistical Result = calculated in accordance with the Statistical Analysis Plan using constituent concentrations observed at each monitoring well during all sampling events within the specified date range
For pH, the values presented are the lower / upper limits
GWPS = Groundwater Protection Standard
GWPS Source:
- Background = background concentration
- Standard = standard specified in 35 I.A.C. § 845.600(a)(1)

FIGURES

BACKGROUND WELL
COMPLIANCE WELL
SOURCE SAMPLE LOCATION
REGULATED UNIT (SUBJECT UNIT)
SITE FEATURE
PROPERTY BOUNDARY

0 150 300 Feet

MONITORING WELL LOCATION MAP

GYPSUM MANAGEMENT FACILITY (GMF) POND

DUCK CREEK POWER PLANT
CANTON, ILLINOIS

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

- COMPLIANCE WELL WITHOUT EXCEEDANCE
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

0 150 300 Feet

GWPS EXCEEDANCE MAP
UPPERMOST AQUIFER
QUARTER 4, 2023 AND QUARTERS 1-3, 2024

FIGURE 2

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
GMF POND
DUCK CREEK POWER PLANT
CANTON, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

pH EXCEEDANCE
MONITORING WELL LOCATION WITHOUT EXCEEDANCE
REGULATED UNIT (SUBJECT UNIT)
SITE FEATURE
PROPERTY BOUNDARY

0 150 300 Feet

GWPS EXCEEDANCE MAP
POTENTIAL MIGRATION PATHWAY
QUARTER 4, 2023 AND QUARTERS 1-3, 2024

FIGURE 3

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
GMF POND
DUCK CREEK POWER PLANT
CANTON, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

COMPLIANCE MONITORING WELL
BACKGROUND MONITORING WELL
PORE WATER WELL
CCR SOURCE WATER SAMPLE
MONITORING WELL

GROUNDWATER ELEVATION CONTOUR (5-FT CONTOUR INTERVAL, NAVD88)
INFERRED GROUNDWATER ELEVATION CONTOUR
GROUNDWATER FLOW DIRECTION
REGULATED UNIT (SUBJECT UNIT)
SITE FEATURE
PROPERTY BOUNDARY

0 150 300 Feet

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 (NAVD88).

POTENTIOMETRIC SURFACE MAP JANUARY 17 AND 18, 2024

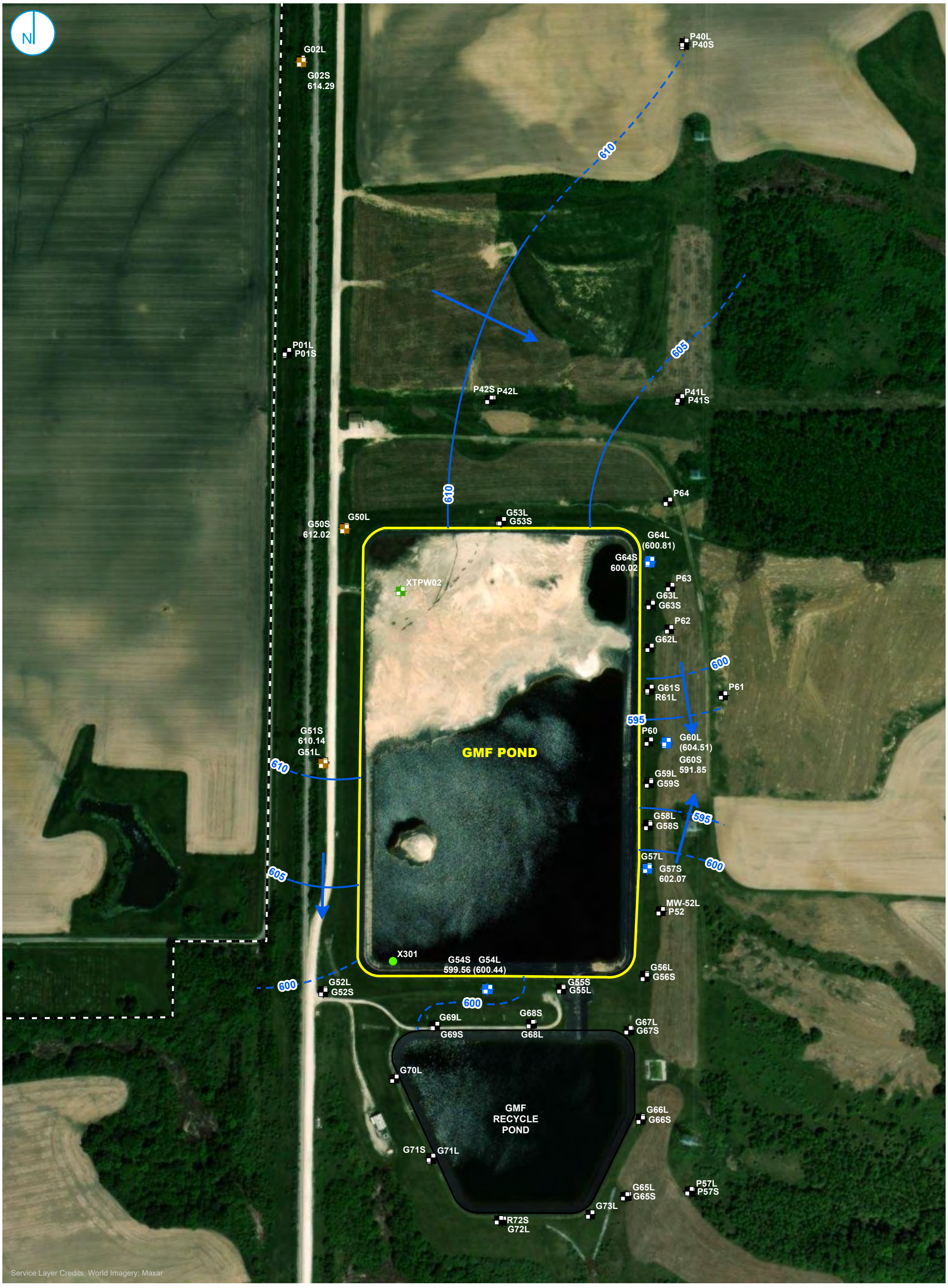
2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT GMF POND

DUCK CREEK POWER PLANT
CANTON, ILLINOIS

FIGURE 4

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL



- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- MONITORING WELL
- CCR SOURCE WATER SAMPLE
- GROUNDWATER ELEVATION CONTOUR (5-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

0 150 300 Feet

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

POTENTIOMETRIC SURFACE MAP FEBRUARY 12, 2024

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT GMF POND

DUCK CREEK POWER PLANT
CANTON, ILLINOIS

FIGURE 5

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

COMPLIANCE MONITORING WELL
BACKGROUND MONITORING WELL
PORE WATER WELL
MONITORING WELL
CCR SOURCE WATER SAMPLE

GROUNDWATER ELEVATION CONTOUR (5-FT CONTOUR INTERVAL, NAVD88)
INFERRED GROUNDWATER ELEVATION CONTOUR
GROUNDWATER FLOW DIRECTION
REGULATED UNIT (SUBJECT UNIT)
SITE FEATURE
PROPERTY BOUNDARY

0 150 300 Feet

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

POTENTIOMETRIC SURFACE MAP MARCH 12, 2024

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT GMF POND

DUCK CREEK POWER PLANT
CANTON, ILLINOIS

FIGURE 6

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL

- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- CCR SOURCE WATER SAMPLE
- MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (5-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

0 150 300 Feet

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

POTENTIOMETRIC SURFACE MAP APRIL 12, 2024

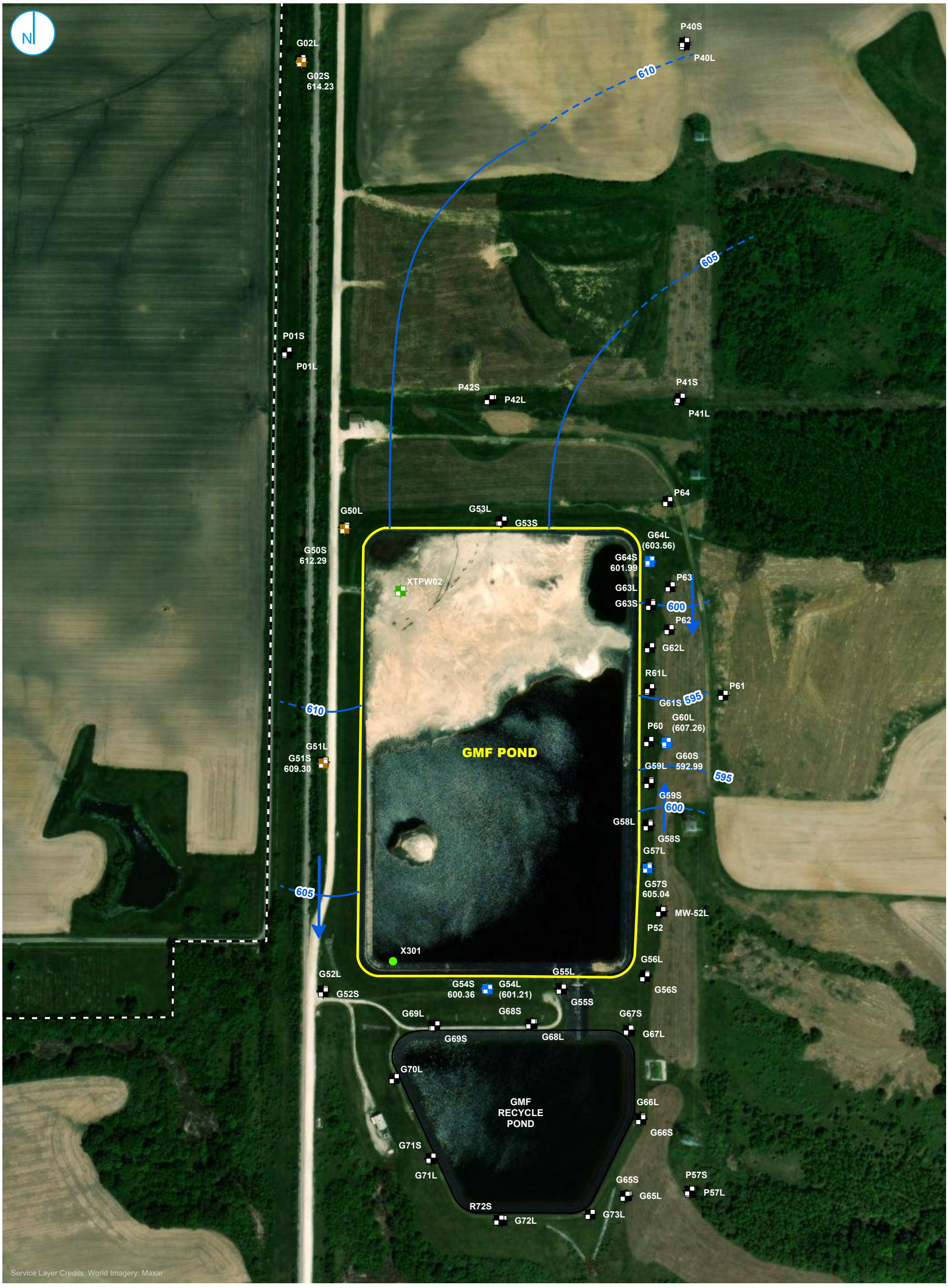
2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT GMF POND

DUCK CREEK POWER PLANT
CANTON, ILLINOIS

FIGURE 7

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL



- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- LEACHATE
- GROUNDWATER ELEVATION CONTOUR (5-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

0 150 300 Feet

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

POTENTIOMETRIC SURFACE MAP MAY 22, 2024

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT GMF POND

DUCK CREEK POWER PLANT
CANTON, ILLINOIS

FIGURE 8

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

COMPLIANCE MONITORING WELL
BACKGROUND MONITORING WELL
LEACHATE

GROUNDWATER ELEVATION CONTOUR (5-FT CONTOUR INTERVAL, NAVD88)
INFERRED GROUNDWATER ELEVATION CONTOUR
GROUNDWATER FLOW DIRECTION
REGULATED UNIT (SUBJECT UNIT)
SITE FEATURE
PROPERTY BOUNDARY

0 150 300 Feet

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

POTENTIOMETRIC SURFACE MAP JUNE 22, 2024

FIGURE 9

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
GMF POND
DUCK CREEK POWER PLANT
CANTON, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- CCR SOURCE WATER SAMPLE
- MONITORING WELL

- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

0 150 300 Feet

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

POTENTIOMETRIC SURFACE MAP JULY 22, 2024

FIGURE 10

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
GMF POND
DUCK CREEK POWER PLANT
CANTON, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

COMPLIANCE MONITORING WELL
BACKGROUND MONITORING WELL
PORE WATER WELL
CCR SOURCE WATER SAMPLE
MONITORING WELL

GROUNDWATER ELEVATION CONTOUR (5-FT CONTOUR INTERVAL, NAVD88)
INFERRED GROUNDWATER ELEVATION CONTOUR
GROUNDWATER FLOW DIRECTION
REGULATED UNIT (SUBJECT UNIT)
SITE FEATURE
PROPERTY BOUNDARY

0 150 300 Feet

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

POTENTIOMETRIC SURFACE MAP AUGUST 14, 2024

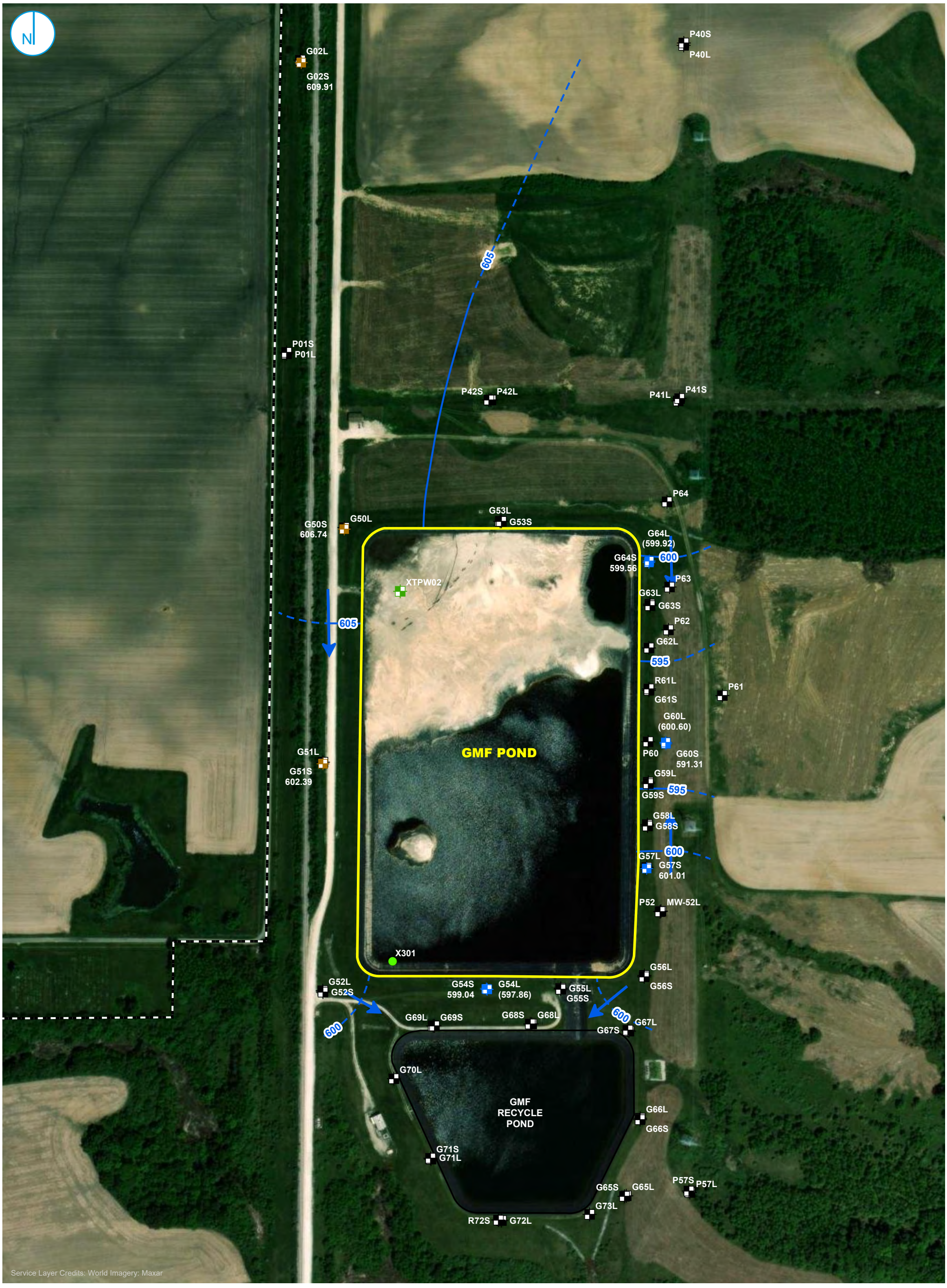
2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT GMF POND

DUCK CREEK POWER PLANT
CANTON, ILLINOIS

FIGURE 11

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL



- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- CCR SOURCE WATER SAMPLE
- MONITORING WELL

- GROUNDWATER ELEVATION CONTOUR (5-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

0 150 300 Feet

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

POTENTIOMETRIC SURFACE MAP SEPTEMBER 14, 2024

FIGURE 12

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
GMF POND
DUCK CREEK POWER PLANT
CANTON, ILLINOIS

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL

COMPLIANCE MONITORING WELL
BACKGROUND MONITORING WELL
PORE WATER WELL
CCR SOURCE WATER SAMPLE
MONITORING WELL

GROUNDWATER ELEVATION CONTOUR (5-FT CONTOUR INTERVAL, NAVD88)
INFERRED GROUNDWATER ELEVATION CONTOUR
GROUNDWATER FLOW DIRECTION
REGULATED UNIT (SUBJECT UNIT)
SITE FEATURE
PROPERTY BOUNDARY

0 150 300 Feet

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

POTENTIOMETRIC SURFACE MAP OCTOBER 14, 2024

FIGURE 13

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
GMF POND
DUCK CREEK POWER PLANT
CANTON, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

COMPLIANCE MONITORING WELL
BACKGROUND MONITORING WELL
PORE WATER WELL
CCR SOURCE WATER SAMPLE
MONITORING WELL

GROUNDWATER ELEVATION CONTOUR (5-FT CONTOUR INTERVAL, NAVD88)
INFERRED GROUNDWATER ELEVATION CONTOUR
GROUNDWATER FLOW DIRECTION
REGULATED UNIT (SUBJECT UNIT)
SITE FEATURE
PROPERTY BOUNDARY

0 150 300 Feet

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

POTENTIOMETRIC SURFACE MAP NOVEMBER 7, 2024

FIGURE 14

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
GMF POND
DUCK CREEK POWER PLANT
CANTON, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

COMPLIANCE MONITORING WELL
BACKGROUND MONITORING WELL
PORE WATER WELL
CCR SOURCE WATER SAMPLE
MONITORING WELL

GROUNDWATER ELEVATION CONTOUR (5-FT CONTOUR INTERVAL, NAVD88)
INFERRED GROUNDWATER ELEVATION CONTOUR
GROUNDWATER FLOW DIRECTION
REGULATED UNIT (SUBJECT UNIT)
SITE FEATURE
PROPERTY BOUNDARY

0 150 300 Feet

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

POTENTIOMETRIC SURFACE MAP DECEMBER 3-4, 2024

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT GMF POND

DUCK CREEK POWER PLANT
CANTON, ILLINOIS

FIGURE 15

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL

ATTACHMENTS

ATTACHMENT A
GROUNDWATER ELEVATION DATA

ATTACHMENT A
GROUNDWATER ELEVATION DATA
2024 35 I.A.C. § 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G02S	Background	UA	01/24/2024	[7.40]	[614.23]
G02S	Background	UA	02/12/2024	7.33	614.29
G02S	Background	UA	03/12/2024	7.71	613.91
G02S	Background	UA	04/12/2024	7.28	614.35
G02S	Background	UA	05/22/2024	7.39	614.23
G02S	Background	UA	06/22/2024	9.65	611.97
G02S	Background	UA	07/22/2024	7.86	613.77
G02S	Background	UA	08/14/2024	9.19	612.59
G02S	Background	UA	09/14/2024	11.87	609.91
G02S	Background	UA	10/14/2024	14.06	607.73
G02S	Background	UA	11/07/2024	13.68	608.09
G02S	Background	UA	12/03/2024	10.81	610.98
G50S	Background	UA	01/17/2024	12.02	611.63
G50S	Background	UA	02/12/2024	11.62	612.02
G50S	Background	UA	03/12/2024	12.06	611.58
G50S	Background	UA	04/12/2024	11.31	612.34
G50S	Background	UA	05/22/2024	11.35	612.29
G50S	Background	UA	06/22/2024	14.45	609.19
G50S	Background	UA	07/22/2024	12.54	611.11
G50S	Background	UA	08/14/2024	14.19	609.39
G50S	Background	UA	09/14/2024	16.85	606.74
G50S	Background	UA	10/14/2024	18.89	604.71
G50S	Background	UA	11/07/2024	17.98	605.61
G50S	Background	UA	12/03/2024	16.35	607.25
G51S	Background	UA	01/17/2024	9.86	609.61
G51S	Background	UA	02/12/2024	9.32	610.14
G51S	Background	UA	03/12/2024	9.76	609.70
G51S	Background	UA	04/12/2024	9.06	610.41
G51S	Background	UA	05/22/2024	10.16	609.30
G51S	Background	UA	06/22/2024	15.55	603.91
G51S	Background	UA	07/22/2024	11.42	608.05
G51S	Background	UA	08/14/2024	14.65	604.69
G51S	Background	UA	09/14/2024	16.95	602.39
G51S	Background	UA	10/14/2024	18.83	600.52
G51S	Background	UA	11/07/2024	18.39	600.95
G51S	Background	UA	12/03/2024	16.03	603.32
G54L	Compliance	PMP	01/17/2024	22.85	599.97
G54L	Compliance	PMP	02/12/2024	22.37	600.44
G54L	Compliance	PMP	03/12/2024	22.24	600.57
G54L	Compliance	PMP	04/12/2024	22.38	600.44
G54L	Compliance	PMP	05/22/2024	21.60	601.21
G54L	Compliance	PMP	06/22/2024	21.04	601.77
G54L	Compliance	PMP	07/22/2024	20.93	601.89
G54L	Compliance	PMP	08/14/2024	23.65	599.20
G54L	Compliance	PMP	09/14/2024	25.00	597.86
G54L	Compliance	PMP	10/14/2024	25.84	597.02

ATTACHMENT A
GROUNDWATER ELEVATION DATA
2024 35 I.A.C. § 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G54L	Compliance	PMP	11/07/2024	25.42	597.44
G54L	Compliance	PMP	12/03/2024	26.37	596.49
G54S	Compliance	UA	01/17/2024	24.11	598.97
G54S	Compliance	UA	02/12/2024	23.51	599.56
G54S	Compliance	UA	03/12/2024	23.41	599.66
G54S	Compliance	UA	04/12/2024	23.56	599.52
G54S	Compliance	UA	05/22/2024	22.71	600.36
G54S	Compliance	UA	06/22/2024	22.23	600.84
G54S	Compliance	UA	07/22/2024	22.29	600.79
G54S	Compliance	UA	08/14/2024	22.66	600.28
G54S	Compliance	UA	09/14/2024	23.90	599.04
G54S	Compliance	UA	10/14/2024	24.72	598.23
G54S	Compliance	UA	11/07/2024	26.26	596.69
G54S	Compliance	UA	12/03/2024	27.55	595.40
G57S	Compliance	UA	01/17/2024	23.45	599.08
G57S	Compliance	UA	02/12/2024	20.45	602.07
G57S	Compliance	UA	03/12/2024	20.80	601.72
G57S	Compliance	UA	04/12/2024	18.36	604.17
G57S	Compliance	UA	05/22/2024	17.48	605.04
G57S	Compliance	UA	06/22/2024	19.76	602.76
G57S	Compliance	UA	07/22/2024	18.46	604.07
G57S	Compliance	UA	08/14/2024	19.61	602.95
G57S	Compliance	UA	09/14/2024	21.55	601.01
G57S	Compliance	UA	10/14/2024	24.02	598.55
G57S	Compliance	UA	11/07/2024	25.37	597.19
G57S	Compliance	UA	12/03/2024	25.77	596.80
G60L	Compliance	PMP	01/17/2024	14.99	600.12
G60L	Compliance	PMP	02/12/2024	10.59	604.51
G60L	Compliance	PMP	03/12/2024	12.60	602.50
G60L	Compliance	PMP	04/12/2024	8.12	606.99
G60L	Compliance	PMP	05/22/2024	7.84	607.26
G60L	Compliance	PMP	06/22/2024	10.91	604.19
G60L	Compliance	PMP	07/22/2024	9.29	605.82
G60L	Compliance	PMP	08/14/2024	11.11	604.14
G60L	Compliance	PMP	09/14/2024	14.65	600.60
G60L	Compliance	PMP	10/14/2024	17.72	597.54
G60L	Compliance	PMP	11/07/2024	20.58	594.67
G60L	Compliance	PMP	12/03/2024	21.15	594.11
G60S	Compliance	UA	01/17/2024	24.56	590.31
G60S	Compliance	UA	02/12/2024	23.01	591.85
G60S	Compliance	UA	03/12/2024	23.88	590.98
G60S	Compliance	UA	04/12/2024	21.83	593.04
G60S	Compliance	UA	05/22/2024	21.87	592.99
G60S	Compliance	UA	06/22/2024	22.83	592.03
G60S	Compliance	UA	07/22/2024	21.21	593.66
G60S	Compliance	UA	08/14/2024	22.20	592.66

ATTACHMENT A
GROUNDWATER ELEVATION DATA
2024 35 I.A.C. § 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G60S	Compliance	UA	09/14/2024	23.55	591.31
G60S	Compliance	UA	10/14/2024	25.54	589.33
G60S	Compliance	UA	11/07/2024	26.35	588.51
G60S	Compliance	UA	12/03/2024	26.48	588.39
G64L	Compliance	PMP	01/17/2024	23.83	598.50
G64L	Compliance	PMP	02/12/2024	21.51	600.81
G64L	Compliance	PMP	03/12/2024	21.77	600.55
G64L	Compliance	PMP	04/12/2024	19.74	602.59
G64L	Compliance	PMP	05/22/2024	18.76	603.56
G64L	Compliance	PMP	06/22/2024	20.72	601.60
G64L	Compliance	PMP	07/22/2024	20.81	601.52
G64L	Compliance	PMP	08/14/2024	21.50	601.01
G64L	Compliance	PMP	09/14/2024	22.59	599.92
G64L	Compliance	PMP	10/14/2024	23.86	598.66
G64L	Compliance	PMP	11/07/2024	24.83	597.68
G64L	Compliance	PMP	12/03/2024	24.92	597.60
G64S	Compliance	UA	01/17/2024	24.73	598.20
G64S	Compliance	UA	02/12/2024	22.90	600.02
G64S	Compliance	UA	03/12/2024	23.21	599.71
G64S	Compliance	UA	04/12/2024	21.76	601.17
G64S	Compliance	UA	05/22/2024	20.93	601.99
G64S	Compliance	UA	06/22/2024	22.28	600.64
G64S	Compliance	UA	07/22/2024	22.21	600.72
G64S	Compliance	UA	08/14/2024	22.54	600.49
G64S	Compliance	UA	09/14/2024	23.47	599.56
G64S	Compliance	UA	10/14/2024	25.06	597.98
G64S	Compliance	UA	11/07/2024	25.67	597.36
G64S	Compliance	UA	12/04/2024	[25.99]	[597.05]
X301	Water Level	S	01/17/2024	DM[1]	
X301	Water Level	S	02/12/2024	DM[1]	
X301	Water Level	S	03/12/2024	DM[1]	
X301	Water Level	S	04/12/2024	DM[1]	
X301	Water Level	S	05/22/2024	DM[1]	
X301	Water Level	S	06/22/2024	DM[1]	
X301	Water Level	S	07/22/2024	49.30	NA
X301	Water Level	S	08/14/2024	DM[1]	
X301	Water Level	S	09/14/2024	DM[1]	
X301	Water Level	S	10/14/2024	48.00	NA

ATTACHMENT A
GROUNDWATER ELEVATION DATA
2024 35 I.A.C. § 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Notes:
BMP = below measuring point
Bracketing [ ] indicates that the measurement was obtained outside of the episodic depth to groundwater measurements time frame.
Depth to Groundwater/Groundwater Elevation Code (if applicable):

- DM[1] = Depth to water was not measured.
- DM[2] = Depth to water was not measured because water was above or below the staff gage markings.
- DM[3] = Depth to water was not measured because the location was inaccessible.
- DM[4] = Depth to water was not measured because water level was below the top of the pump.
- DM[5] = Depth to water was not measured because water level was above the top of casing (artesian well).
- DM[6] = Depth to water was not measured because of damage to the well.
- DM[7] = Depth to water was not measured due to required pressure transducer maintenance.
- DM[8] = Lab provided groundwater elevation data and not depth to water.

NA = not available/not applicable
NAVD88 = North American Vertical Datum of 1988
Monitored Unit Abbreviations:

- PMP = potential migration pathway
- S = source water
- UA = uppermost aquifer

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ATTACHMENT B
COMPARISON TO BACKGROUND

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 1, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G54L	PMP	E004	Antimony, total	mg/L	04/14/21 - 01/30/24	12	100	All ND - Last	0.003	0.003
G54L	PMP	E004	Arsenic, total	mg/L	04/14/21 - 01/30/24	12	0	CB around linear reg	-0.00427	0.00920
G54L	PMP	E004	Barium, total	mg/L	04/14/21 - 01/30/24	12	0	CI around mean	0.163	0.280
G54L	PMP	E004	Beryllium, total	mg/L	04/14/21 - 01/30/24	12	100	All ND - Last	0.001	0.001
G54L	PMP	E004	Boron, total	mg/L	04/14/21 - 01/30/24	13	0	CI around geomean	0.0184	0.210
G54L	PMP	E004	Cadmium, total	mg/L	04/14/21 - 01/30/24	12	100	All ND - Last	0.001	0.001
G54L	PMP	E004	Chloride, total	mg/L	04/14/21 - 01/30/24	13	0	CB around T-S line	-0.285	17.0
G54L	PMP	E004	Chromium, total	mg/L	04/14/21 - 01/30/24	12	92	CI around median	0.004	0.00590
G54L	PMP	E004	Cobalt, total	mg/L	04/14/21 - 01/30/24	12	50	CI around median	0.002	0.002
G54L	PMP	E004	Fluoride, total	mg/L	04/14/21 - 01/30/24	13	85	CI around median	0.25	0.498
G54L	PMP	E004	Lead, total	mg/L	04/14/21 - 01/30/24	12	86	Most recent sample	0.001	0.0150
G54L	PMP	E004	Lithium, total	mg/L	04/14/21 - 01/30/24	12	100	All ND - Last	0.02	0.02
G54L	PMP	E004	Mercury, total	mg/L	04/14/21 - 01/30/24	12	92	CI around median	0.0002	0.000980
G54L	PMP	E004	Molybdenum, total	mg/L	04/14/21 - 01/30/24	12	58	CI around median	0.001	0.00230
G54L	PMP	E004	pH (field)	SU	04/14/21 - 01/30/24	19	0	CI around median	6.5/6.6	6.6/7.4
G54L	PMP	E004	Radium 226 + Radium 228, total	pCi/L	04/14/21 - 01/30/24	12	0	CI around mean	0.358	2.00
G54L	PMP	E004	Selenium, total	mg/L	04/14/21 - 01/30/24	12	100	All ND - Last	0.001	0.00120
G54L	PMP	E004	Sulfate, total	mg/L	04/14/21 - 01/30/24	13	0	CI around mean	71	55.0
G54L	PMP	E004	Thallium, total	mg/L	04/14/21 - 01/30/24	12	100	All ND - Last	0.001	0.001
G54L	PMP	E004	Total Dissolved Solids	mg/L	04/14/21 - 01/30/24	19	0	CI around mean	717	483
G54S	UA	E004	Antimony, total	mg/L	12/04/15 - 01/19/24	12	100	All ND - Last	0.003	0.003
G54S	UA	E004	Arsenic, total	mg/L	12/04/15 - 01/19/24	12	24	CI around median	0.001	0.00920
G54S	UA	E004	Barium, total	mg/L	12/04/15 - 01/19/24	12	0	CI around mean	0.208	0.280
G54S	UA	E004	Beryllium, total	mg/L	12/04/15 - 01/19/24	12	100	All ND - Last	0.001	0.001
G54S	UA	E004	Boron, total	mg/L	12/04/15 - 01/19/24	26	0	CI around mean	0.0324	0.210
G54S	UA	E004	Cadmium, total	mg/L	12/04/15 - 01/19/24	12	100	All ND - Last	0.001	0.001
G54S	UA	E004	Chloride, total	mg/L	12/04/15 - 01/19/24	24	10	CI around geomean	2.05	17.0

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 1, 2024
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DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G54S	UA	E004	Chromium, total	mg/L	12/04/15 - 01/19/24	12	100	All ND - Last	0.004	0.00590
G54S	UA	E004	Cobalt, total	mg/L	12/04/15 - 01/19/24	12	100	All ND - Last	0.002	0.002
G54S	UA	E004	Fluoride, total	mg/L	12/04/15 - 01/19/24	25	77	CI around median	0.25	0.498
G54S	UA	E004	Lead, total	mg/L	12/04/15 - 01/19/24	12	100	All ND - Last	0.001	0.0150
G54S	UA	E004	Lithium, total	mg/L	12/04/15 - 01/19/24	12	75	CB around T-S line	0.01	0.02
G54S	UA	E004	Mercury, total	mg/L	12/04/15 - 01/19/24	12	85	CI around median	0.0002	0.000980
G54S	UA	E004	Molybdenum, total	mg/L	12/04/15 - 01/19/24	12	0	CI around mean	0.00141	0.00230
G54S	UA	E004	pH (field)	SU	12/04/15 - 01/19/24	33	0	CB around linear reg	6.5/6.9	6.6/7.4
G54S	UA	E004R	pH (field)	SU	12/04/15 - 02/06/24	34	0	CB around linear reg	6.5/6.9	6.6/7.4
G54S	UA	E004	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 01/19/24	12	0	CI around geomean	0.657	2.00
G54S	UA	E004	Selenium, total	mg/L	12/04/15 - 01/19/24	12	100	All ND - Last	0.001	0.00120
G54S	UA	E004	Sulfate, total	mg/L	12/04/15 - 01/19/24	24	0	CB around T-S line	31.1	55.0
G54S	UA	E004	Thallium, total	mg/L	12/04/15 - 01/19/24	12	100	All ND - Last	0.001	0.001
G54S	UA	E004	Total Dissolved Solids	mg/L	12/04/15 - 01/19/24	32	0	CI around mean	519	483
G57S	UA	E004	Antimony, total	mg/L	12/04/15 - 01/26/24	12	92	CI around median	0.003	0.003
G57S	UA	E004	Arsenic, total	mg/L	12/04/15 - 01/26/24	12	90	Most recent sample	0.001	0.00920
G57S	UA	E004	Barium, total	mg/L	12/04/15 - 01/26/24	12	0	CI around median	0.13	0.280
G57S	UA	E004	Beryllium, total	mg/L	12/04/15 - 01/26/24	12	92	CI around median	0.001	0.001
G57S	UA	E004	Boron, total	mg/L	12/04/15 - 01/26/24	25	44	CI around median	0.01	0.210
G57S	UA	E004	Cadmium, total	mg/L	12/04/15 - 01/26/24	12	92	CI around median	0.001	0.001
G57S	UA	E004	Chloride, total	mg/L	12/04/15 - 01/26/24	25	2	CI around median	18	17.0
G57S	UA	E004	Chromium, total	mg/L	12/04/15 - 01/26/24	12	92	Most recent sample	0.004	0.00590
G57S	UA	E004	Cobalt, total	mg/L	12/04/15 - 01/26/24	12	92	Most recent sample	0.002	0.002
G57S	UA	E004	Fluoride, total	mg/L	12/04/15 - 01/26/24	26	33	CI around median	0.25	0.498
G57S	UA	E004	Lead, total	mg/L	12/04/15 - 01/26/24	12	76	CI around median	0.001	0.0150
G57S	UA	E004	Lithium, total	mg/L	12/04/15 - 01/26/24	12	100	All ND - Last	0.02	0.02
G57S	UA	E004	Mercury, total	mg/L	12/04/15 - 01/26/24	12	100	All ND - Last	0.0002	0.000980

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GMF POND
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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G57S	UA	E004	Molybdenum, total	mg/L	12/04/15 - 01/26/24	12	92	CI around median	0.001	0.00230
G57S	UA	E004	pH (field)	SU	12/04/15 - 01/26/24	32	0	CB around linear reg	6.5/6.8	6.6/7.4
G57S	UA	E004	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 01/26/24	12	0	CI around mean	0.238	2.00
G57S	UA	E004	Selenium, total	mg/L	12/04/15 - 01/26/24	12	92	Most recent sample	0.001	0.00120
G57S	UA	E004	Sulfate, total	mg/L	12/04/15 - 01/26/24	24	0	CB around linear reg	46.3	55.0
G57S	UA	E004	Thallium, total	mg/L	12/04/15 - 01/26/24	12	92	CI around median	0.001	0.001
G57S	UA	E004	Total Dissolved Solids	mg/L	12/04/15 - 01/26/24	32	0	CB around linear reg	784	483
G60L	PMP	E004	Antimony, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.003	0.003
G60L	PMP	E004	Arsenic, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.001	0.00920
G60L	PMP	E004	Barium, total	mg/L	04/14/21 - 01/25/24	12	0	CI around mean	0.0159	0.280
G60L	PMP	E004	Beryllium, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.001	0.001
G60L	PMP	E004	Boron, total	mg/L	04/14/21 - 01/25/24	13	0	CI around geomean	0.0257	0.210
G60L	PMP	E004	Cadmium, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.001	0.001
G60L	PMP	E004	Chloride, total	mg/L	04/14/21 - 01/25/24	13	0	CB around linear reg	7.5	17.0
G60L	PMP	E004	Chromium, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.004	0.00590
G60L	PMP	E004	Cobalt, total	mg/L	04/14/21 - 01/25/24	12	17	CI around mean	0.00268	0.002
G60L	PMP	E004	Fluoride, total	mg/L	04/14/21 - 01/25/24	13	100	All ND - Last	0.25	0.498
G60L	PMP	E004	Lead, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.001	0.0150
G60L	PMP	E004	Lithium, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.02	0.02
G60L	PMP	E004	Mercury, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.0002	0.000980
G60L	PMP	E004	Molybdenum, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.001	0.00230
G60L	PMP	E004	pH (field)	SU	04/14/21 - 01/25/24	19	0	CB around linear reg	5.6/6.1	6.6/7.4
G60L	PMP	E004	Radium 226 + Radium 228, total	pCi/L	04/14/21 - 01/25/24	12	0	CI around mean	0.249	2.00
G60L	PMP	E004	Selenium, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.001	0.00120
G60L	PMP	E004	Sulfate, total	mg/L	04/14/21 - 01/25/24	13	8	CI around mean	153	55.0
G60L	PMP	E004	Thallium, total	mg/L	04/14/21 - 01/25/24	12	100	All ND - Last	0.001	0.001
G60L	PMP	E004	Total Dissolved Solids	mg/L	04/14/21 - 01/25/24	19	0	CI around mean	549	483

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GMF POND
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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G60S	UA	E004	Antimony, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.003	0.003
G60S	UA	E004	Arsenic, total	mg/L	12/04/15 - 01/25/24	12	15	CI around geomean	0.00101	0.00920
G60S	UA	E004	Barium, total	mg/L	12/04/15 - 01/25/24	12	0	CI around mean	0.142	0.280
G60S	UA	E004	Beryllium, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.001	0.001
G60S	UA	E004	Boron, total	mg/L	12/04/15 - 01/25/24	27	9	CB around T-S line	0.0267	0.210
G60S	UA	E004	Cadmium, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.001	0.001
G60S	UA	E004	Chloride, total	mg/L	12/04/15 - 01/25/24	25	2	CI around geomean	7.74	17.0
G60S	UA	E004	Chromium, total	mg/L	12/04/15 - 01/25/24	12	50	CI around median	0.004	0.00590
G60S	UA	E004	Cobalt, total	mg/L	12/04/15 - 01/25/24	12	75	CI around median	0.002	0.002
G60S	UA	E004	Fluoride, total	mg/L	12/04/15 - 01/25/24	26	46	CI around median	0.25	0.498
G60S	UA	E004	Lead, total	mg/L	12/04/15 - 01/25/24	12	30	CI around geomean	0.00108	0.0150
G60S	UA	E004	Lithium, total	mg/L	12/04/15 - 01/25/24	12	83	CI around median	0.01	0.02
G60S	UA	E004	Mercury, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.0002	0.000980
G60S	UA	E004	Molybdenum, total	mg/L	12/04/15 - 01/25/24	12	50	CI around median	0.001	0.00230
G60S	UA	E004	pH (field)	SU	12/04/15 - 01/25/24	33	0	CI around mean	6.7/6.8	6.6/7.4
G60S	UA	E004	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 01/25/24	12	0	CI around geomean	0.756	2.00
G60S	UA	E004	Selenium, total	mg/L	12/04/15 - 01/25/24	12	83	CI around median	0.001	0.00120
G60S	UA	E004	Sulfate, total	mg/L	12/04/15 - 01/25/24	26	0	CI around median	67	55.0
G60S	UA	E004	Thallium, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.001	0.001
G60S	UA	E004	Total Dissolved Solids	mg/L	12/04/15 - 01/25/24	33	0	CI around median	550	483
G64L	PMP	E004	Antimony, total	mg/L	05/15/23 - 02/01/24	4	100	All ND - Last	0.003	0.003
G64L	PMP	E004	Arsenic, total	mg/L	05/15/23 - 02/01/24	4	40	CI around mean	-0.000274	0.00920
G64L	PMP	E004	Barium, total	mg/L	05/15/23 - 02/01/24	4	0	CI around mean	0.0746	0.280
G64L	PMP	E004	Beryllium, total	mg/L	05/15/23 - 02/01/24	4	100	All ND - Last	0.001	0.001
G64L	PMP	E004	Boron, total	mg/L	01/11/23 - 02/01/24	5	27	CI around mean	0.000126	0.210
G64L	PMP	E004	Cadmium, total	mg/L	05/15/23 - 02/01/24	4	100	All ND - Last	0.001	0.001
G64L	PMP	E004	Chloride, total	mg/L	01/11/23 - 02/01/24	5	9	CI around mean	1.79	17.0

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G64L	PMP	E004	Chromium, total	mg/L	05/15/23 - 02/01/24	4	50	CI around mean	0.00136	0.00590
G64L	PMP	E004	Cobalt, total	mg/L	05/15/23 - 02/01/24	4	100	All ND - Last	0.002	0.002
G64L	PMP	E004	Fluoride, total	mg/L	01/11/23 - 02/01/24	5	40	CI around mean	0.186	0.498
G64L	PMP	E004	Lead, total	mg/L	05/15/23 - 02/01/24	4	40	CI around mean	-0.000319	0.0150
G64L	PMP	E004	Lithium, total	mg/L	05/15/23 - 02/01/24	4	100	All ND - Last	0.02	0.02
G64L	PMP	E004	Mercury, total	mg/L	05/15/23 - 02/01/24	4	100	All ND - Last	0.0002	0.000980
G64L	PMP	E004	Molybdenum, total	mg/L	05/15/23 - 02/01/24	4	50	CI around mean	0.00066	0.00230
G64L	PMP	E004	pH (field)	SU	05/21/21 - 02/01/24	12	0	CI around mean	6.8/7.2	6.6/7.4
G64L	PMP	E004	Radium 226 + Radium 228, total	pCi/L	05/15/23 - 02/01/24	4	0	CI around mean	0.379	2.00
G64L	PMP	E004	Selenium, total	mg/L	05/15/23 - 02/01/24	4	100	All ND - Last	0.001	0.00120
G64L	PMP	E004	Sulfate, total	mg/L	01/11/23 - 02/01/24	5	0	CI around mean	14.4	55.0
G64L	PMP	E004	Thallium, total	mg/L	05/15/23 - 02/01/24	4	100	All ND - Last	0.001	0.001
G64L	PMP	E004	Total Dissolved Solids	mg/L	05/21/21 - 02/01/24	12	0	CI around mean	544	483
G64S	UA	E004	Antimony, total	mg/L	12/04/15 - 01/25/24	12	92	CI around median	0.003	0.003
G64S	UA	E004	Arsenic, total	mg/L	12/04/15 - 01/25/24	12	10	CB around linear reg	-0.000627	0.00920
G64S	UA	E004	Barium, total	mg/L	12/04/15 - 01/25/24	12	0	CI around mean	0.16	0.280
G64S	UA	E004	Beryllium, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.001	0.001
G64S	UA	E004	Boron, total	mg/L	12/04/15 - 01/25/24	25	3	CI around geomean	0.0149	0.210
G64S	UA	E004	Cadmium, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.001	0.001
G64S	UA	E004	Chloride, total	mg/L	12/04/15 - 01/25/24	24	4	CI around geomean	3.28	17.0
G64S	UA	E004	Chromium, total	mg/L	12/04/15 - 01/25/24	12	92	CI around median	0.004	0.00590
G64S	UA	E004	Cobalt, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.002	0.002
G64S	UA	E004	Fluoride, total	mg/L	12/04/15 - 01/25/24	26	15	CI around median	0.287	0.498
G64S	UA	E004	Lead, total	mg/L	12/04/15 - 01/25/24	12	43	CI around median	0.001	0.0150
G64S	UA	E004	Lithium, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.02	0.02
G64S	UA	E004	Mercury, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.0002	0.000980
G64S	UA	E004	Molybdenum, total	mg/L	12/04/15 - 01/25/24	12	17	CB around linear reg	0.000539	0.00230

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CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G64S	UA	E004	pH (field)	SU	12/04/15 - 01/25/24	33	0	CI around median	6.8/7.0	6.6/7.4
G64S	UA	E004	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 01/25/24	12	0	CI around mean	0.587	2.00
G64S	UA	E004	Selenium, total	mg/L	12/04/15 - 01/25/24	12	92	CI around median	0.001	0.00120
G64S	UA	E004	Sulfate, total	mg/L	12/04/15 - 01/25/24	24	0	CI around mean	23.8	55.0
G64S	UA	E004	Thallium, total	mg/L	12/04/15 - 01/25/24	12	100	All ND - Last	0.001	0.001
G64S	UA	E004	Total Dissolved Solids	mg/L	12/04/15 - 01/25/24	31	0	CI around median	420	483

Notes:
Lower Confidence Limit (LCL) or Upper Confidence Limit (UCL) exceeded the statistical background value
HSU = hydrostratigraphic unit:

PMP = Potential Migration Pathway

UA = Uppermost Aquifer

mg/L = milligrams per liter
ND = non-detect
pCi/L = picocuries per liter
R = resample
SU = standard units
Sample Count = number of samples from Sampled Date Range used to calculate the Statistical Result
Statistical Calculation = method used to calculate the statistical result:

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

CB around T-S line = Confidence band around Thiel-Sen line

CB around linear reg = Confidence band around linear regression

CI around geomean = Confidence interval around the geometric mean

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

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

Statistical Result = calculated in accordance with the Statistical Analysis Plan using constituent concentrations observed at each monitoring well during all sampling events within the specified date range
For pH, the values presented are the lower / upper limits of the background determination

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 2, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G54L	PMP	E005	Antimony, total	mg/L	04/14/21 - 04/23/24	13	100	All ND - Last	0.003	0.003
G54L	PMP	E005	Arsenic, total	mg/L	04/14/21 - 04/23/24	13	0	CB around linear reg	-0.00377	0.00920
G54L	PMP	E005	Barium, total	mg/L	04/14/21 - 04/23/24	13	0	CI around mean	0.167	0.280
G54L	PMP	E005	Beryllium, total	mg/L	04/14/21 - 04/23/24	13	100	All ND - Last	0.001	0.001
G54L	PMP	E005	Boron, total	mg/L	04/14/21 - 04/23/24	14	6	CI around geomean	0.0149	0.210
G54L	PMP	E005	Cadmium, total	mg/L	04/14/21 - 04/23/24	13	100	All ND - Last	0.001	0.001
G54L	PMP	E005	Chloride, total	mg/L	04/14/21 - 04/23/24	14	0	CB around T-S line	21	17.0
G54L	PMP	E005	Chromium, total	mg/L	04/14/21 - 04/23/24	13	92	CI around median	0.004	0.00590
G54L	PMP	E005	Cobalt, total	mg/L	04/14/21 - 04/23/24	13	54	CB around T-S line	-0.00524	0.002
G54L	PMP	E005	Fluoride, total	mg/L	04/14/21 - 04/23/24	14	86	CI around median	0.25	0.498
G54L	PMP	E005	Lead, total	mg/L	04/14/21 - 04/23/24	13	87	Most recent sample	0.001	0.0150
G54L	PMP	E005	Lithium, total	mg/L	04/14/21 - 04/23/24	13	100	All ND - Last	0.02	0.02
G54L	PMP	E005	Mercury, total	mg/L	04/14/21 - 04/23/24	13	92	CI around median	0.0002	0.000980
G54L	PMP	E005	Molybdenum, total	mg/L	04/14/21 - 04/23/24	13	54	CI around median	0.001	0.00230
G54L	PMP	E005	pH (field)	SU	04/14/21 - 04/23/24	20	0	CI around median	6.5/6.6	6.6/7.4
G54L	PMP	E005	Radium 226 + Radium 228, total	pCi/L	04/14/21 - 04/23/24	13	0	CI around mean	0.351	2.00
G54L	PMP	E005	Selenium, total	mg/L	04/14/21 - 04/23/24	13	100	All ND - Last	0.001	0.00120
G54L	PMP	E005	Sulfate, total	mg/L	04/14/21 - 04/23/24	14	0	CB around linear reg	96.5	55.0
G54L	PMP	E005	Thallium, total	mg/L	04/14/21 - 04/23/24	13	100	All ND - Last	0.001	0.001
G54L	PMP	E005	Total Dissolved Solids	mg/L	04/14/21 - 04/30/24	20	0	CB around linear reg	756	483
G54S	UA	E005	Antimony, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.003	0.003
G54S	UA	E005	Arsenic, total	mg/L	12/04/15 - 04/24/24	13	23	CI around median	0.001	0.00920
G54S	UA	E005	Barium, total	mg/L	12/04/15 - 04/24/24	13	0	CI around mean	0.209	0.280
G54S	UA	E005	Beryllium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.001
G54S	UA	E005	Boron, total	mg/L	12/04/15 - 04/24/24	27	0	CI around mean	0.0326	0.210
G54S	UA	E005	Cadmium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.001
G54S	UA	E005	Chloride, total	mg/L	12/04/15 - 04/24/24	25	10	CI around geomean	2.1	17.0

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 2, 2024
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DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G54S	UA	E005	Chromium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.004	0.00590
G54S	UA	E005	Cobalt, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.002	0.002
G54S	UA	E005	Fluoride, total	mg/L	12/04/15 - 04/24/24	26	78	CI around median	0.25	0.498
G54S	UA	E005	Lead, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.0150
G54S	UA	E005	Lithium, total	mg/L	12/04/15 - 04/24/24	13	77	CB around T-S line	0.01	0.02
G54S	UA	E005	Mercury, total	mg/L	12/04/15 - 04/24/24	13	86	CI around median	0.0002	0.000980
G54S	UA	E005	Molybdenum, total	mg/L	12/04/15 - 04/24/24	13	0	CI around mean	0.00136	0.00230
G54S	UA	E005	pH (field)	SU	12/04/15 - 04/24/24	35	0	CB around linear reg	6.5/6.9	6.6/7.4
G54S	UA	E005	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 04/24/24	13	0	CI around geomean	0.427	2.00
G54S	UA	E005	Selenium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.00120
G54S	UA	E005	Sulfate, total	mg/L	12/04/15 - 04/24/24	25	0	CB around T-S line	30.8	55.0
G54S	UA	E005	Thallium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.001
G54S	UA	E005	Total Dissolved Solids	mg/L	12/04/15 - 04/24/24	33	0	CI around mean	518	483
G57S	UA	E005	Antimony, total	mg/L	12/04/15 - 04/24/24	13	93	CI around median	0.003	0.003
G57S	UA	E005	Arsenic, total	mg/L	12/04/15 - 04/24/24	13	91	Most recent sample	0.001	0.00920
G57S	UA	E005	Barium, total	mg/L	12/04/15 - 04/24/24	13	0	CB around linear reg	0.172	0.280
G57S	UA	E005	Beryllium, total	mg/L	12/04/15 - 04/24/24	13	93	CI around median	0.001	0.001
G57S	UA	E005	Boron, total	mg/L	12/04/15 - 04/24/24	26	43	CI around median	0.01	0.210
G57S	UA	E005	Cadmium, total	mg/L	12/04/15 - 04/24/24	13	92	CI around median	0.001	0.001
G57S	UA	E005	Chloride, total	mg/L	12/04/15 - 04/24/24	26	2	CI around median	18	17.0
G57S	UA	E005	Chromium, total	mg/L	12/04/15 - 04/24/24	13	93	Most recent sample	0.004	0.00590
G57S	UA	E005	Cobalt, total	mg/L	12/04/15 - 04/24/24	13	93	Most recent sample	0.002	0.002
G57S	UA	E005	Fluoride, total	mg/L	12/04/15 - 04/24/24	27	36	CI around median	0.25	0.498
G57S	UA	E005	Lead, total	mg/L	12/04/15 - 04/24/24	13	77	CI around median	0.001	0.0150
G57S	UA	E005	Lithium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.02	0.02
G57S	UA	E005	Mercury, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.0002	0.000980
G57S	UA	E005	Molybdenum, total	mg/L	12/04/15 - 04/24/24	13	92	CI around median	0.001	0.00230

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DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G57S	UA	E005	pH (field)	SU	12/04/15 - 04/24/24	33	0	CB around linear reg	6.5/6.8	6.6/7.4
G57S	UA	E005	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 04/24/24	13	0	CI around mean	0.229	2.00
G57S	UA	E005	Selenium, total	mg/L	12/04/15 - 04/24/24	13	93	Most recent sample	0.001	0.00120
G57S	UA	E005	Sulfate, total	mg/L	12/04/15 - 04/24/24	25	0	CB around linear reg	46.3	55.0
G57S	UA	E005	Thallium, total	mg/L	12/04/15 - 04/24/24	13	93	CI around median	0.001	0.001
G57S	UA	E005	Total Dissolved Solids	mg/L	12/04/15 - 04/24/24	33	0	CB around linear reg	792	483
G60L	PMP	E005	Antimony, total	mg/L	04/14/21 - 04/24/24	13	100	All ND - Last	0.003	0.003
G60L	PMP	E005	Arsenic, total	mg/L	04/14/21 - 04/24/24	13	92	CI around median	0.001	0.00920
G60L	PMP	E005	Barium, total	mg/L	04/14/21 - 04/24/24	13	0	CB around T-S line	0.0194	0.280
G60L	PMP	E005	Beryllium, total	mg/L	04/14/21 - 04/24/24	13	100	All ND - Last	0.001	0.001
G60L	PMP	E005	Boron, total	mg/L	04/14/21 - 04/24/24	14	0	CI around geomean	0.0254	0.210
G60L	PMP	E005	Cadmium, total	mg/L	04/14/21 - 04/24/24	13	92	CI around median	0.001	0.001
G60L	PMP	E005	Chloride, total	mg/L	04/14/21 - 04/24/24	14	0	CB around linear reg	6.99	17.0
G60L	PMP	E005	Chromium, total	mg/L	04/14/21 - 04/24/24	13	92	CI around median	0.004	0.00590
G60L	PMP	E005	Cobalt, total	mg/L	04/14/21 - 04/24/24	13	15	CI around geomean	0.00263	0.002
G60L	PMP	E005	Fluoride, total	mg/L	04/14/21 - 04/24/24	14	100	All ND - Last	0.25	0.498
G60L	PMP	E005	Lead, total	mg/L	04/14/21 - 04/24/24	13	92	CI around median	0.001	0.0150
G60L	PMP	E005	Lithium, total	mg/L	04/14/21 - 04/24/24	13	100	All ND - Last	0.02	0.02
G60L	PMP	E005	Mercury, total	mg/L	04/14/21 - 04/24/24	13	100	All ND - Last	0.0002	0.000980
G60L	PMP	E005	Molybdenum, total	mg/L	04/14/21 - 04/24/24	13	100	All ND - Last	0.001	0.00230
G60L	PMP	E005	pH (field)	SU	04/14/21 - 04/24/24	20	0	CI around mean	6.0/6.2	6.6/7.4
G60L	PMP	E005	Radium 226 + Radium 228, total	pCi/L	04/14/21 - 04/24/24	13	0	CI around mean	0.238	2.00
G60L	PMP	E005	Selenium, total	mg/L	04/14/21 - 04/24/24	13	100	All ND - Last	0.001	0.00120
G60L	PMP	E005	Sulfate, total	mg/L	04/14/21 - 04/24/24	14	7	CI around mean	155	55.0
G60L	PMP	E005	Thallium, total	mg/L	04/14/21 - 04/24/24	13	100	All ND - Last	0.001	0.001
G60L	PMP	E005	Total Dissolved Solids	mg/L	04/14/21 - 04/24/24	20	0	CI around mean	544	483
G60S	UA	E005	Antimony, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.003	0.003

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 2, 2024
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DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G60S	UA	E005	Arsenic, total	mg/L	12/04/15 - 04/24/24	13	14	CI around mean	0.00123	0.00920
G60S	UA	E005	Barium, total	mg/L	12/04/15 - 04/24/24	13	0	CI around mean	0.146	0.280
G60S	UA	E005	Beryllium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.001
G60S	UA	E005	Boron, total	mg/L	12/04/15 - 04/24/24	28	8	CB around T-S line	0.0264	0.210
G60S	UA	E005	Cadmium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.001
G60S	UA	E005	Chloride, total	mg/L	12/04/15 - 04/24/24	26	2	CI around geomean	7.59	17.0
G60S	UA	E005	Chromium, total	mg/L	12/04/15 - 04/24/24	13	46	CI around median	0.004	0.00590
G60S	UA	E005	Cobalt, total	mg/L	12/04/15 - 04/24/24	13	69	CI around median	0.002	0.002
G60S	UA	E005	Fluoride, total	mg/L	12/04/15 - 04/24/24	27	48	CI around median	0.25	0.498
G60S	UA	E005	Lead, total	mg/L	12/04/15 - 04/24/24	13	29	CI around geomean	0.00125	0.0150
G60S	UA	E005	Lithium, total	mg/L	12/04/15 - 04/24/24	13	77	CB around T-S line	0.01	0.02
G60S	UA	E005	Mercury, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.0002	0.000980
G60S	UA	E005	Molybdenum, total	mg/L	12/04/15 - 04/24/24	13	46	CI around median	0.001	0.00230
G60S	UA	E005	pH (field)	SU	12/04/15 - 04/24/24	34	0	CI around mean	6.7/6.8	6.6/7.4
G60S	UA	E005	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 04/24/24	13	0	CI around geomean	0.726	2.00
G60S	UA	E005	Selenium, total	mg/L	12/04/15 - 04/24/24	13	85	CI around median	0.001	0.00120
G60S	UA	E005	Sulfate, total	mg/L	12/04/15 - 04/24/24	27	0	CB around T-S line	69.6	55.0
G60S	UA	E005	Thallium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.001
G60S	UA	E005	Total Dissolved Solids	mg/L	12/04/15 - 04/24/24	34	0	CI around median	560	483
G64L	PMP	E005	Antimony, total	mg/L	05/15/23 - 04/22/24	5	100	All ND - Last	0.003	0.003
G64L	PMP	E005	Arsenic, total	mg/L	05/15/23 - 04/22/24	5	46	CI around mean	0.000176	0.00920
G64L	PMP	E005	Barium, total	mg/L	05/15/23 - 04/22/24	5	0	CI around mean	0.0861	0.280
G64L	PMP	E005	Beryllium, total	mg/L	05/15/23 - 04/22/24	5	100	All ND - Last	0.001	0.001
G64L	PMP	E005	Boron, total	mg/L	01/11/23 - 04/22/24	6	25	CI around mean	0.0054	0.210
G64L	PMP	E005	Cadmium, total	mg/L	05/15/23 - 04/22/24	5	100	All ND - Last	0.001	0.001
G64L	PMP	E005	Chloride, total	mg/L	01/11/23 - 04/22/24	6	8	CI around mean	1.93	17.0
G64L	PMP	E005	Chromium, total	mg/L	05/15/23 - 04/22/24	5	60	CI around median (Last Sample, n<7)	0.004	0.00590

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 2, 2024
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DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G64L	PMP	E005	Cobalt, total	mg/L	05/15/23 - 04/22/24	5	100	All ND - Last	0.002	0.002
G64L	PMP	E005	Fluoride, total	mg/L	01/11/23 - 04/22/24	6	33	CI around mean	0.212	0.498
G64L	PMP	E005	Lead, total	mg/L	05/15/23 - 04/22/24	5	46	CI around mean	0.00014	0.0150
G64L	PMP	E005	Lithium, total	mg/L	05/15/23 - 04/22/24	5	100	All ND - Last	0.02	0.02
G64L	PMP	E005	Mercury, total	mg/L	05/15/23 - 04/22/24	5	100	All ND - Last	0.0002	0.000980
G64L	PMP	E005	Molybdenum, total	mg/L	05/15/23 - 04/22/24	5	40	CI around mean	0.000864	0.00230
G64L	PMP	E005	pH (field)	SU	05/21/21 - 04/22/24	13	0	CI around mean	6.8/7.2	6.6/7.4
G64L	PMP	E005	Radium 226 + Radium 228, total	pCi/L	05/15/23 - 04/22/24	5	0	CI around mean	0.362	2.00
G64L	PMP	E005	Selenium, total	mg/L	05/15/23 - 04/22/24	5	100	All ND - Last	0.001	0.00120
G64L	PMP	E005	Sulfate, total	mg/L	01/11/23 - 04/22/24	6	0	CI around mean	7.01	55.0
G64L	PMP	E005	Thallium, total	mg/L	05/15/23 - 04/22/24	5	100	All ND - Last	0.001	0.001
G64L	PMP	E005	Total Dissolved Solids	mg/L	05/21/21 - 04/22/24	13	0	CI around mean	550	483
G64S	UA	E005	Antimony, total	mg/L	12/04/15 - 04/24/24	13	93	CI around median	0.003	0.003
G64S	UA	E005	Arsenic, total	mg/L	12/04/15 - 04/24/24	13	14	CB around linear reg	-0.000539	0.00920
G64S	UA	E005	Barium, total	mg/L	12/04/15 - 04/24/24	13	0	CI around mean	0.161	0.280
G64S	UA	E005	Beryllium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.001
G64S	UA	E005	Boron, total	mg/L	12/04/15 - 04/24/24	26	3	CI around geomean	0.015	0.210
G64S	UA	E005	Cadmium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.001
G64S	UA	E005	Chloride, total	mg/L	12/04/15 - 04/24/24	25	4	CI around geomean	3.22	17.0
G64S	UA	E005	Chromium, total	mg/L	12/04/15 - 04/24/24	13	93	CI around median	0.004	0.00590
G64S	UA	E005	Cobalt, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.002	0.002
G64S	UA	E005	Fluoride, total	mg/L	12/04/15 - 04/24/24	27	18	CI around mean	0.292	0.498
G64S	UA	E005	Lead, total	mg/L	12/04/15 - 04/24/24	13	46	CB around linear reg	-0.000819	0.0150
G64S	UA	E005	Lithium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.02	0.02
G64S	UA	E005	Mercury, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.0002	0.000980
G64S	UA	E005	Molybdenum, total	mg/L	12/04/15 - 04/24/24	13	15	CI around mean	0.00106	0.00230
G64S	UA	E005	pH (field)	SU	12/04/15 - 04/24/24	34	0	CI around median	6.8/7.0	6.6/7.4

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 2, 2024
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DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G64S	UA	E005	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 04/24/24	13	0	CI around mean	0.529	2.00
G64S	UA	E005	Selenium, total	mg/L	12/04/15 - 04/24/24	13	93	CI around median	0.001	0.00120
G64S	UA	E005	Sulfate, total	mg/L	12/04/15 - 04/24/24	25	0	CB around linear reg	20.2	55.0
G64S	UA	E005	Thallium, total	mg/L	12/04/15 - 04/24/24	13	100	All ND - Last	0.001	0.001
G64S	UA	E005	Total Dissolved Solids	mg/L	12/04/15 - 04/24/24	32	0	CI around median	420	483

Notes:
Lower Confidence Limit (LCL) or Upper Confidence Limit (UCL) exceeded the statistical background value
HSU = hydrostratigraphic unit:

PMP = Potential Migration Pathway

UA = Uppermost Aquifer

mg/L = milligrams per liter
ND = non-detect
pCi/L = picocuries per liter
SU = standard units
Sample Count = number of samples from Sampled Date Range used to calculate the Statistical Result
Statistical Calculation = method used to calculate the statistical result:

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

CB around T-S line = Confidence band around Thiel-Sen line

CB around linear reg = Confidence band around linear regression

CI around geomean = Confidence interval around the geometric mean

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

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

Statistical Result = calculated in accordance with the Statistical Analysis Plan using constituent concentrations observed at each monitoring well during all sampling events within the specified date range
For pH, the values presented are the lower / upper limits of the background determination

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 3, 2024
845 QUARTERLY REPORT
DUCK CREEK POWER PLANT
GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G54L	PMP	E006	Antimony, total	mg/L	04/14/21 - 07/29/24	14	100	All ND - Last	0.003	0.003
G54L	PMP	E006	Arsenic, total	mg/L	04/14/21 - 07/29/24	14	0	CB around linear reg	-0.00353	0.00920
G54L	PMP	E006	Barium, total	mg/L	04/14/21 - 07/29/24	14	0	CI around mean	0.171	0.280
G54L	PMP	E006	Beryllium, total	mg/L	04/14/21 - 07/29/24	14	100	All ND - Last	0.001	0.001
G54L	PMP	E006	Boron, total	mg/L	04/14/21 - 07/29/24	15	12	CI around geomean	0.0128	0.210
G54L	PMP	E006	Cadmium, total	mg/L	04/14/21 - 07/29/24	14	100	All ND - Last	0.001	0.001
G54L	PMP	E006	Chloride, total	mg/L	04/14/21 - 07/29/24	15	0	CB around linear reg	42.9	17.0
G54L	PMP	E006	Chromium, total	mg/L	04/14/21 - 07/29/24	14	93	CI around median	0.004	0.00590
G54L	PMP	E006	Cobalt, total	mg/L	04/14/21 - 07/29/24	14	57	CB around T-S line	-0.00542	0.002
G54L	PMP	E006	Fluoride, total	mg/L	04/14/21 - 07/29/24	15	87	CI around median	0.25	0.498
G54L	PMP	E006	Lead, total	mg/L	04/14/21 - 07/29/24	14	88	Most recent sample	0.001	0.0150
G54L	PMP	E006	Lithium, total	mg/L	04/14/21 - 07/29/24	14	100	All ND - Last	0.02	0.02
G54L	PMP	E006	Mercury, total	mg/L	04/14/21 - 07/29/24	14	93	CI around median	0.0002	0.000980
G54L	PMP	E006	Molybdenum, total	mg/L	04/14/21 - 07/29/24	14	57	CI around median	0.001	0.00230
G54L	PMP	E006	pH (field)	SU	04/14/21 - 07/29/24	21	0	CI around median	6.5/6.6	6.6/7.4
G54L	PMP	E006	Radium 226 + Radium 228, total	pCi/L	04/14/21 - 07/29/24	14	0	CI around mean	0.353	2.00
G54L	PMP	E006	Selenium, total	mg/L	04/14/21 - 07/29/24	14	100	All ND - Last	0.001	0.00120
G54L	PMP	E006	Sulfate, total	mg/L	04/14/21 - 07/29/24	15	0	CB around linear reg	101	55.0
G54L	PMP	E006	Thallium, total	mg/L	04/14/21 - 07/29/24	14	100	All ND - Last	0.001	0.001
G54L	PMP	E006	Total Dissolved Solids	mg/L	04/14/21 - 07/29/24	21	0	CB around linear reg	781	483
G54S	UA	E006	Antimony, total	mg/L	12/04/15 - 07/29/24	14	100	All ND - Last	0.003	0.003
G54S	UA	E006	Arsenic, total	mg/L	12/04/15 - 07/29/24	14	22	CI around median	0.001	0.00920
G54S	UA	E006	Barium, total	mg/L	12/04/15 - 07/29/24	14	0	CI around mean	0.212	0.280
G54S	UA	E006	Beryllium, total	mg/L	12/04/15 - 07/29/24	14	100	All ND - Last	0.001	0.001
G54S	UA	E006	Boron, total	mg/L	12/04/15 - 07/29/24	28	0	CI around mean	0.0315	0.210
G54S	UA	E006	Cadmium, total	mg/L	12/04/15 - 07/29/24	14	100	All ND - Last	0.001	0.001
G54S	UA	E006	Chloride, total	mg/L	12/04/15 - 07/29/24	26	10	CI around geomean	2.15	17.0

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GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G54S	UA	E006	Chromium, total	mg/L	12/04/15 - 07/29/24	14	100	All ND - Last	0.004	0.00590
G54S	UA	E006	Cobalt, total	mg/L	12/04/15 - 07/29/24	14	100	All ND - Last	0.002	0.002
G54S	UA	E006	Fluoride, total	mg/L	12/04/15 - 07/29/24	27	79	CI around median	0.25	0.498
G54S	UA	E006	Lead, total	mg/L	12/04/15 - 07/29/24	14	96	CI around median	0.001	0.0150
G54S	UA	E006	Lithium, total	mg/L	12/04/15 - 07/29/24	14	79	CB around T-S line	0.01	0.02
G54S	UA	E006	Mercury, total	mg/L	12/04/15 - 07/29/24	14	87	CI around median	0.0002	0.000980
G54S	UA	E006	Molybdenum, total	mg/L	12/04/15 - 07/29/24	14	7	CB around linear reg	0.000618	0.00230
G54S	UA	E006	pH (field)	SU	12/04/15 - 07/29/24	36	0	CB around linear reg	6.5/6.9	6.6/7.4
G54S	UA	E006	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 07/29/24	14	0	CI around geomean	0.468	2.00
G54S	UA	E006	Selenium, total	mg/L	12/04/15 - 07/29/24	14	100	All ND - Last	0.001	0.00120
G54S	UA	E006	Sulfate, total	mg/L	12/04/15 - 07/29/24	26	0	CB around T-S line	30.9	55.0
G54S	UA	E006	Thallium, total	mg/L	12/04/15 - 07/29/24	14	100	All ND - Last	0.001	0.001
G54S	UA	E006	Total Dissolved Solids	mg/L	12/04/15 - 07/29/24	34	0	CI around mean	517	483
G57S	UA	E006	Antimony, total	mg/L	12/04/15 - 07/23/24	14	93	CI around median	0.003	0.003
G57S	UA	E006	Arsenic, total	mg/L	12/04/15 - 07/23/24	14	91	Most recent sample	0.001	0.00920
G57S	UA	E006	Barium, total	mg/L	12/04/15 - 07/23/24	14	0	CB around linear reg	0.176	0.280
G57S	UA	E006	Beryllium, total	mg/L	12/04/15 - 07/23/24	14	93	CI around median	0.001	0.001
G57S	UA	E006	Boron, total	mg/L	12/04/15 - 07/23/24	27	44	CI around median	0.01	0.210
G57S	UA	E006	Cadmium, total	mg/L	12/04/15 - 07/23/24	14	93	CI around median	0.001	0.001
G57S	UA	E006	Chloride, total	mg/L	12/04/15 - 07/23/24	27	2	CI around median	18	17.0
G57S	UA	E006	Chromium, total	mg/L	12/04/15 - 07/23/24	14	93	Most recent sample	0.004	0.00590
G57S	UA	E006	Cobalt, total	mg/L	12/04/15 - 07/23/24	14	93	Most recent sample	0.002	0.002
G57S	UA	E006	Fluoride, total	mg/L	12/04/15 - 07/23/24	28	38	CI around median	0.25	0.498
G57S	UA	E006	Lead, total	mg/L	12/04/15 - 07/23/24	14	78	CI around median	0.001	0.0150
G57S	UA	E006	Lithium, total	mg/L	12/04/15 - 07/23/24	14	100	All ND - Last	0.02	0.02
G57S	UA	E006	Mercury, total	mg/L	12/04/15 - 07/23/24	14	100	All ND - Last	0.0002	0.000980
G57S	UA	E006	Molybdenum, total	mg/L	12/04/15 - 07/23/24	14	93	CI around median	0.001	0.00230

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GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G57S	UA	E006	pH (field)	SU	12/04/15 - 07/23/24	34	0	CB around linear reg	6.5/6.8	6.6/7.4
G57S	UA	E006	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 07/23/24	14	0	CI around mean	0.218	2.00
G57S	UA	E006	Selenium, total	mg/L	12/04/15 - 07/23/24	14	93	Most recent sample	0.001	0.00120
G57S	UA	E006	Sulfate, total	mg/L	12/04/15 - 07/23/24	26	0	CB around linear reg	46.2	55.0
G57S	UA	E006	Thallium, total	mg/L	12/04/15 - 07/23/24	14	93	CI around median	0.001	0.001
G57S	UA	E006	Total Dissolved Solids	mg/L	12/04/15 - 07/23/24	34	0	CB around linear reg	803	483
G60L	PMP	E006	Antimony, total	mg/L	04/14/21 - 07/31/24	14	100	All ND - Last	0.003	0.003
G60L	PMP	E006	Arsenic, total	mg/L	04/14/21 - 07/31/24	14	93	CI around median	0.001	0.00920
G60L	PMP	E006	Barium, total	mg/L	04/14/21 - 07/31/24	14	0	CB around linear reg	0.0272	0.280
G60L	PMP	E006	Beryllium, total	mg/L	04/14/21 - 07/31/24	14	100	All ND - Last	0.001	0.001
G60L	PMP	E006	Boron, total	mg/L	04/14/21 - 07/31/24	15	0	CI around geomean	0.0259	0.210
G60L	PMP	E006	Cadmium, total	mg/L	04/14/21 - 07/31/24	14	93	CI around median	0.001	0.001
G60L	PMP	E006	Chloride, total	mg/L	04/14/21 - 07/31/24	15	0	CB around linear reg	6.06	17.0
G60L	PMP	E006	Chromium, total	mg/L	04/14/21 - 07/31/24	14	86	CI around median	0.004	0.00590
G60L	PMP	E006	Cobalt, total	mg/L	04/14/21 - 07/31/24	14	14	CB around linear reg	0.00643	0.002
G60L	PMP	E006R	Cobalt, total	mg/L	04/14/21 - 09/12/24	15	13	CB around linear reg	0.00419	0.002
G60L	PMP	E006	Fluoride, total	mg/L	04/14/21 - 07/31/24	15	100	All ND - Last	0.25	0.498
G60L	PMP	E006	Lead, total	mg/L	04/14/21 - 07/31/24	14	86	CI around median	0.001	0.0150
G60L	PMP	E006	Lithium, total	mg/L	04/14/21 - 07/31/24	14	100	All ND - Last	0.02	0.02
G60L	PMP	E006	Mercury, total	mg/L	04/14/21 - 07/31/24	14	100	All ND - Last	0.0002	0.000980
G60L	PMP	E006	Molybdenum, total	mg/L	04/14/21 - 07/31/24	14	100	All ND - Last	0.001	0.00230
G60L	PMP	E006	pH (field)	SU	04/14/21 - 07/31/24	21	0	CI around mean	6.0/6.2	6.6/7.4
G60L	PMP	E006R	pH (field)	SU	04/14/21 - 09/12/24	22	0	CI around mean	6.0/6.2	6.6/7.4
G60L	PMP	E006	Radium 226 + Radium 228, total	pCi/L	04/14/21 - 07/31/24	14	0	CI around mean	0.31	2.00
G60L	PMP	E006	Selenium, total	mg/L	04/14/21 - 07/31/24	14	100	All ND - Last	0.001	0.00120
G60L	PMP	E006	Sulfate, total	mg/L	04/14/21 - 07/31/24	15	7	CI around mean	154	55.0
G60L	PMP	E006	Thallium, total	mg/L	04/14/21 - 07/31/24	14	100	All ND - Last	0.001	0.001

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GMF POND
CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G60L	PMP	E006	Total Dissolved Solids	mg/L	04/14/21 - 07/31/24	21	0	CI around mean	545	483
G60S	UA	E006	Antimony, total	mg/L	12/04/15 - 07/23/24	14	100	All ND - Last	0.003	0.003
G60S	UA	E006	Arsenic, total	mg/L	12/04/15 - 07/23/24	14	14	CI around geomean	0.00117	0.00920
G60S	UA	E006	Barium, total	mg/L	12/04/15 - 07/23/24	14	0	CI around mean	0.146	0.280
G60S	UA	E006	Beryllium, total	mg/L	12/04/15 - 07/23/24	14	100	All ND - Last	0.001	0.001
G60S	UA	E006	Boron, total	mg/L	12/04/15 - 07/23/24	29	8	CI around geomean	0.0168	0.210
G60S	UA	E006	Cadmium, total	mg/L	12/04/15 - 07/23/24	14	100	All ND - Last	0.001	0.001
G60S	UA	E006	Chloride, total	mg/L	12/04/15 - 07/23/24	27	2	CB around T-S line	4.39	17.0
G60S	UA	E006	Chromium, total	mg/L	12/04/15 - 07/23/24	14	50	CI around median	0.004	0.00590
G60S	UA	E006	Cobalt, total	mg/L	12/04/15 - 07/23/24	14	71	CI around median	0.002	0.002
G60S	UA	E006	Fluoride, total	mg/L	12/04/15 - 07/23/24	28	50	CI around median	0.25	0.498
G60S	UA	E006	Lead, total	mg/L	12/04/15 - 07/23/24	14	32	CI around median	0.001	0.0150
G60S	UA	E006	Lithium, total	mg/L	12/04/15 - 07/23/24	14	79	CB around T-S line	0.01	0.02
G60S	UA	E006	Mercury, total	mg/L	12/04/15 - 07/23/24	14	100	All ND - Last	0.0002	0.000980
G60S	UA	E006	Molybdenum, total	mg/L	12/04/15 - 07/23/24	14	43	CI around median	0.001	0.00230
G60S	UA	E006	pH (field)	SU	12/04/15 - 07/23/24	35	0	CI around mean	6.7/6.8	6.6/7.4
G60S	UA	E006	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 07/23/24	14	0	CI around geomean	0.767	2.00
G60S	UA	E006	Selenium, total	mg/L	12/04/15 - 07/23/24	14	86	CI around median	0.001	0.00120
G60S	UA	E006	Sulfate, total	mg/L	12/04/15 - 07/23/24	28	0	CI around median	67	55.0
G60S	UA	E006	Thallium, total	mg/L	12/04/15 - 07/23/24	14	100	All ND - Last	0.001	0.001
G60S	UA	E006	Total Dissolved Solids	mg/L	12/04/15 - 07/23/24	35	0	CI around median	560	483
G64L	PMP	E006	Antimony, total	mg/L	05/15/23 - 07/31/24	6	100	All ND - Last	0.003	0.003
G64L	PMP	E006	Arsenic, total	mg/L	05/15/23 - 07/31/24	6	50	CI around median (Last Sample, n<7)	0.001	0.00920
G64L	PMP	E006	Barium, total	mg/L	05/15/23 - 07/31/24	6	0	CI around mean	0.0887	0.280
G64L	PMP	E006	Beryllium, total	mg/L	05/15/23 - 07/31/24	6	100	All ND - Last	0.001	0.001
G64L	PMP	E006	Boron, total	mg/L	01/11/23 - 07/31/24	7	23	CI around mean	0.0043	0.210
G64L	PMP	E006	Cadmium, total	mg/L	05/15/23 - 07/31/24	6	100	All ND - Last	0.001	0.001

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GMF POND
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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G64L	PMP	E006	Chloride, total	mg/L	01/11/23 - 07/31/24	7	8	CI around mean	1.92	17.0
G64L	PMP	E006	Chromium, total	mg/L	05/15/23 - 07/31/24	6	67	CI around median (Last Sample, n<7)	0.004	0.00590
G64L	PMP	E006	Cobalt, total	mg/L	05/15/23 - 07/31/24	6	100	All ND - Last	0.002	0.002
G64L	PMP	E006	Fluoride, total	mg/L	01/11/23 - 07/31/24	7	43	CI around geomean	0.232	0.498
G64L	PMP	E006	Lead, total	mg/L	05/15/23 - 07/31/24	6	50	CI around median (Last Sample, n<7)	0.001	0.0150
G64L	PMP	E006	Lithium, total	mg/L	05/15/23 - 07/31/24	6	100	All ND - Last	0.02	0.02
G64L	PMP	E006	Mercury, total	mg/L	05/15/23 - 07/31/24	6	100	All ND - Last	0.0002	0.000980
G64L	PMP	E006	Molybdenum, total	mg/L	05/15/23 - 07/31/24	6	33	CI around mean	0.000891	0.00230
G64L	PMP	E006	pH (field)	SU	05/21/21 - 07/31/24	14	0	CI around mean	6.8/7.1	6.6/7.4
G64L	PMP	E006	Radium 226 + Radium 228, total	pCi/L	05/15/23 - 07/31/24	6	0	CI around mean	0.167	2.00
G64L	PMP	E006	Selenium, total	mg/L	05/15/23 - 07/31/24	6	100	All ND - Last	0.001	0.00120
G64L	PMP	E006	Sulfate, total	mg/L	01/11/23 - 07/31/24	7	0	CI around mean	17.4	55.0
G64L	PMP	E006	Thallium, total	mg/L	05/15/23 - 07/31/24	6	100	All ND - Last	0.001	0.001
G64L	PMP	E006	Total Dissolved Solids	mg/L	05/21/21 - 07/31/24	14	0	CI around mean	556	483
G64S	UA	E006	Antimony, total	mg/L	12/04/15 - 08/01/24	14	93	CI around median	0.003	0.003
G64S	UA	E006	Arsenic, total	mg/L	12/04/15 - 08/01/24	14	13	CB around linear reg	-0.000373	0.00920
G64S	UA	E006	Barium, total	mg/L	12/04/15 - 08/01/24	14	0	CI around mean	0.162	0.280
G64S	UA	E006	Beryllium, total	mg/L	12/04/15 - 08/01/24	14	100	All ND - Last	0.001	0.001
G64S	UA	E006	Boron, total	mg/L	12/04/15 - 08/01/24	27	3	CI around geomean	0.0151	0.210
G64S	UA	E006	Cadmium, total	mg/L	12/04/15 - 08/01/24	14	100	All ND - Last	0.001	0.001
G64S	UA	E006	Chloride, total	mg/L	12/04/15 - 08/01/24	26	4	CB around T-S line	2.55	17.0
G64S	UA	E006	Chromium, total	mg/L	12/04/15 - 08/01/24	14	93	CI around median	0.004	0.00590
G64S	UA	E006	Cobalt, total	mg/L	12/04/15 - 08/01/24	14	100	All ND - Last	0.002	0.002
G64S	UA	E006	Fluoride, total	mg/L	12/04/15 - 08/01/24	28	21	CI around mean	0.289	0.498
G64S	UA	E006	Lead, total	mg/L	12/04/15 - 08/01/24	14	48	CB around linear reg	-0.000624	0.0150
G64S	UA	E006	Lithium, total	mg/L	12/04/15 - 08/01/24	14	100	All ND - Last	0.02	0.02
G64S	UA	E006	Mercury, total	mg/L	12/04/15 - 08/01/24	14	100	All ND - Last	0.0002	0.000980

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CANTON, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G64S	UA	E006	Molybdenum, total	mg/L	12/04/15 - 08/01/24	14	14	CI around mean	0.00109	0.00230
G64S	UA	E006	pH (field)	SU	12/04/15 - 08/01/24	35	0	CI around median	6.8/7.0	6.6/7.4
G64S	UA	E006	Radium 226 + Radium 228, total	pCi/L	12/04/15 - 08/01/24	14	0	CI around mean	0.52	2.00
G64S	UA	E006	Selenium, total	mg/L	12/04/15 - 08/01/24	14	93	CI around median	0.001	0.00120
G64S	UA	E006	Sulfate, total	mg/L	12/04/15 - 08/01/24	26	0	CB around linear reg	20.3	55.0
G64S	UA	E006	Thallium, total	mg/L	12/04/15 - 08/01/24	14	100	All ND - Last	0.001	0.001
G64S	UA	E006	Total Dissolved Solids	mg/L	12/04/15 - 08/01/24	33	0	CI around median	420	483

Notes:
Lower Confidence Limit (LCL) or Upper Confidence Limit (UCL) exceeded the statistical background value
HSU = hydrostratigraphic unit:
PMP = Potential Migration Pathway
UA = Uppermost Aquifer
mg/L = milligrams per liter
Missing Code (if applicable):
NR[1] = Select parameters were not analyzed.
NS[1] = This well has been, or will be, abandoned; therefore, a sample was not collected.
NS[2] = Well either needs or was undergoing maintenance, therefore, a sample was not collected.
NS[3] = A sample was not collected because the location was inaccessible.
NS[4] = The location could not be found, therefore a sample was not collected.
NS[5] = A sample was not collected because of damage to the well.
NS[6] = A sample was not collected because of pump issues.
NS[7] = A sample was not collected because the well was either dry or was purged dry and did not recover.
PM[1] = Select parameters were not analyzed as the well purged dry during sample collection and did not sufficiently recover to sample for all parameters.
ND = non-detect
pCi/L = picocuries per liter
R = resample
SU = standard units
Sample Count = number of samples from Sampled Date Range used to calculate the Statistical Result
Statistical Calculation = method used to calculate the statistical result:
All ND - Last = All results were below the reporting limit, and the last determined reporting limit is shown
CB around T-S line = Confidence band around Thiel-Sen line
CB around linear reg = Confidence band around linear regression
CI around geomean = Confidence interval around the geometric mean
CI around mean = Confidence interval around the mean
CI around median = Confidence interval around the median
Most recent sample = Result for the most recently collected sample used due to insufficient data
Statistical Result = calculated in accordance with the Statistical Analysis Plan using constituent concentrations observed at each monitoring well during all sampling events within the specified date range
For pH, the values presented are the lower / upper limits of the background determination