



Illinois Power Generating Company
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: Coffeen GMF Gypsum Stack Pond (IEPA ID: W1350150004-03) 2024 Annual Consolidated Report

Dear Mr. LeCrone:

In accordance with 35 IAC § 845.550, Illinois Power Generating Company (IPGC) is submitting the annual consolidated report for the GMF Gypsum Stack Pond (IEPA ID: W1350150004-03), as enclosed.

Sincerely,

A handwritten signature in blue ink that reads 'Dianna Tickner'.

Dianna Tickner
Sr. Director Decommissioning & Demolition

Enclosures

Annual Consolidated Report
Illinois Power Generating Company
Coffeen Power Plant
GMF Gypsum Stack Pond; IEPA ID: **W1350150004-03**

In accordance with 35 IAC § 845.550, Illinois Power Generating Company (IPGC) 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 Coffeen Power Station

Illinois Power Generating Company

**Coffeen Power Plant
134 CIPS Lane
Coffeen, IL 62017**

November 2024

**Coffeen Power Station
ANNUAL CCR FUGITIVE DUST CONTROL REPORT**

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

Approved by: 
Name

Director, Decommissioning and Demolition
Title

This Annual CCR Fugitive Dust Control Report has been prepared for the Coffeen Power Station in accordance with 40 CFR 257.80(c) and 35 I.A.C. 845.500. 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 Coffeen Power Station 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.
	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.
Handling of CCR at the facility	CCR bottom ash removed from CCR surface impoundments and loaded into trucks for transport remains conditioned during handling.
	CCR fly ash to be emplaced in the landfill is conditioned before emplacement.
	Load CCR transport trucks from the CCR fly ash silo using a chute with a sock (skirt).
	Perform housekeeping, as necessary, in the fly ash loading area.

**Coffeen Power Station
ANNUAL CCR FUGITIVE DUST CONTROL REPORT**

CCR Activity	Actions Taken to Control CCR Fugitive Dust
Handling of CCR at the facility	CCR 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.
Transportation of CCR at the facility	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.
	Water CCR haul roads, including landfill roads, as necessary.

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.

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.

Coffeen Power Plant ceased operation in November 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 Coffeen Power Station 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	Coffeen Power Station Montgomery County, Illinois 62017 9/16/2024
Operator Name / Address	Luminant Generation Company LLC 6555 Sierra Drive, Irving, TX 75039
CCR unit	Gypsum Stack 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 I 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	No Instrumentation
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 1150 acre-feet – Plant closed in 2020
(b)(2)(E) The approximate volume of the impounded water and CCR contained in the unit at the time of the inspection.	Approximately 950 acre-feet – Plant closed in 2020
(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: Coffeen Power Station

CCR Unit: Gypsum Stack 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		626.05			24	
CCR	609		627	7.5		26

Section 3

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

Prepared for
Illinois Power Generating Company

Date
January 31, 2025

Project No.
1940106781-003

**2024 35 I.A.C. § 845 ANNUAL
GROUNDWATER MONITORING AND
CORRECTIVE ACTION REPORT
GMF GYPSUM STACK POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS
IEPA ID NO. W1350150004-03**

**2024 35 I.A.C. § 845 ANNUAL GROUNDWATER
MONITORING AND CORRECTIVE ACTION REPORT
COFFEEN POWER PLANT ASH POND**

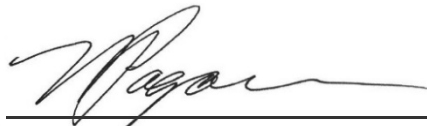
Project name **Coffeen Power Plant GMF Gypsum Stack Pond**
Project no. **1940106781-003**
Recipient **Illinois Power Generating Company**
Document type **Annual Groundwater Monitoring and Corrective Action Report**
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Prepared by **Kristen L. Theesfeld**
Checked by **Lauren D. Cook**
Approved by **Nicole M. Pagano, PE, PG**
Description **Annual Report required by 35 I.A.C. § 845**

Ramboll
234 W. Florida Street
Fifth Floor
Milwaukee, WI 53204
USA

T 414-837-3607
F 414-837-3608
<https://ramboll.com>



Kristen L. Theesfeld
Hydrogeologist



Nicole M. Pagano, PE, PG
Senior Project Manager

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TABLES (IN TEXT)

Table A	35 I.A.C. § 845 Monitoring Program Summary for 2024
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TABLES (ATTACHED)

Table 1	Field Parameters and Analytical Results – Quarter 1, 2024
	Field Parameters and Analytical Results – Quarter 2, 2024
	Field Parameters and Analytical Results – Quarter 3, 2024
	Field Parameters and Analytical Results – Quarter 4, 2024
Table 2	Evaluation of Compliance – Quarter 1, 2024
	Evaluation of Compliance – Quarter 2, 2024
	Evaluation of Compliance – Quarter 3, 2024

FIGURES (ATTACHED)

Figure 1	Monitoring Well Location Map
Figure 2	GWPS Exceedance Map Uppermost Aquifer, Quarters 1-3, 2024
Figure 3	GWPS Exceedance Map Deep Aquifer, Quarters 1-3, 2024
Figure 4	Potentiometric Surface Map, January 12, 2024
Figure 5	Potentiometric Surface Map, February 12 and 13, 2024
Figure 6	Potentiometric Surface Map, March 29, 2024
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Figure 8	Potentiometric Surface Map, May 29, 2024
Figure 9	Potentiometric Surface Map, June 29, 2024
Figure 10	Potentiometric Surface Map, July 29 and 30, 2024
Figure 11	Potentiometric Surface Map, August 28, 2024
Figure 12	Potentiometric Surface Map, September 28, 2024
Figure 13	Potentiometric Surface Map, October 28 and 29, 2024
Figure 14	Potentiometric Surface Map, November 19, 2024
Figure 15	Potentiometric Surface Map, December 11-13, 2024

ATTACHMENTS

- Attachment A Groundwater Elevation Data
- Attachment B Alternative Source Demonstration IEPA Approval Letter
- Attachment C Comparison to Background – Quarter 1, 2024
Comparison to Background – Quarter 2, 2024
Comparison to Background – Quarter 3, 2024

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
CPP	Coffeen Power Plant
E004	Quarter 1, 2024 sampling event
E005	Quarter 2, 2024 sampling event
E006	Quarter 3, 2024 sampling event
E007	Quarter 4, 2024 sampling event
GMF GSP	Gypsum Management Facility Gypsum Stack Pond
GWPS	groundwater protection standard
ID	identification
IEPA	Illinois Environmental Protection Agency
IPGC	Illinois Power Generating Company
NID	National Inventory of Dams
No.	number
Ramboll	Ramboll Americas Engineering Solutions, Inc.
SI	surface impoundment
SSI	statistically significant increase
TDS	Total Dissolved Solids

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 Gypsum Stack Pond (GMF GSP) located at Coffeen Power Plant (CPP) near Coffeen, Illinois. The GMF GSP is recognized by coal combustion residuals (CCR) unit identification (ID) number (No.) 103, Illinois Environmental Protection Agency (IEPA) ID No. W1350150004-03, and National Inventory of Dams (NID) No. IL50579.

As required by 35 I.A.C. § 845, an operating permit application for the GMF GSP was submitted by Illinois Power Generating Company (IPGC) to IEPA by October 31, 2021 in accordance with the requirements specified in 35 I.A.C. § 845.230(d) and is pending approval. IPGC 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 GSP 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 GSP 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 exceedances¹ of the GWPS (**Table 2**). The following GWPS exceedances were determined in 2024 (Ramboll, 2024a; Ramboll, 2024b; Ramboll, 2024c)²:

- Arsenic in G206D
- Sulfate in G215 and G217
- Total Dissolved Solids (TDS) in G215

An Alternative Source Demonstration (ASD) was submitted on August 6, 2024 for the arsenic exceedance of the GWPS at monitoring well G206D (Geosyntec, 2024). The IEPA provided a written response on September 5, 2024 that it concurred with the ASD (**Attachment B**).

An ASD was not completed for the remaining GWPS exceedances listed above; therefore, an assessment of corrective measures (CMA) was initiated in accordance with 35 I.A.C. § 845.650(d)(3) on January 14, 2024. A CMA extension request was submitted to IEPA on January 15, 2024 and approved on January 17, 2024. The CMA extension request and IEPA approval

¹ Throughout this document, "exceedance" or "exceedances" is intended to refer only to potential exceedances of proposed applicable background statistics or GWPSs as described in the proposed groundwater monitoring program which was submitted to the IEPA on October 25, 2025 as part of IPGC's operating permit application for the CPP GMF GSP. That operating permit application, including the proposed groundwater monitoring program, remains under review by the IEPA and, therefore, IPGC 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.

letter were included in the 2023 Annual Groundwater Monitoring and Corrective Action Report (Ramboll, 2024d).

The CMA was completed in accordance with 35 I.A.C. § 845.660 and submitted to IEPA on June 12, 2024 (Ramboll, 2024e). In accordance with 35 I.A.C. § 845.670, a semiannual report describing the progress in selecting and designing a groundwater corrective action remedy and developing a corrective action plan was submitted to IEPA on December 12, 2024 (Ramboll, 2024f).

As required by 35 I.A.C. § 845.670, a corrective action plan that identifies the selected remedy must be submitted to IEPA within one year after completing the CMA. Activities currently ongoing in support of developing the corrective action plan include development of a corrective action alternatives analysis, human health and ecological risk assessment, and supporting technical documents. Accordingly, a public meeting will be held prior to selection of a remedy in accordance with 35 I.A.C. § 845.660(d) and a corrective action plan will be submitted to IEPA on or before June 12, 2025. Remedial activities have not been initiated under 35 I.A.C. § 845.780 in 2024.

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 C**).

1. INTRODUCTION

This report has been prepared by Ramboll on behalf of IPGC, to provide the information required by 35 I.A.C. § 845.610(e) for the GMF GSP located at CPP near Coffeen, 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 15**).
- 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 C**).
- 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 provides the required information for the CPP the GMF GSP for calendar year 2024.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

An operating permit application for the GMF GSP was submitted by IPGC to IEPA by October 31, 2021 in accordance with the requirements specified in 35 I.A.C. § 845.230(d) and is pending approval. IPGC entered into a CCA with IEPA on December 28, 2022. The CCA required that groundwater monitoring in accordance with the proposed groundwater monitoring plan and sampling methodologies provided in the operating permit application for the GMF GSP commenced in the second quarter of 2023. After the GMF GSP 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 GSP was also submitted by IPGC to IEPA on July 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 GSP in 2024. An ASD was completed on August 6, 2024 for the arsenic exceedance of the GWPS at monitoring well G206D (Geosyntec, 2024). The IEPA provided a written response on September 5, 2024 that it concurred with the ASD (**Attachment B**).

An ASD was not completed for the remaining GWPS exceedances; therefore, a CMA was initiated on January 14, 2024. A CMA extension request was submitted to IEPA on January 15, 2024 and approved on January 17, 2024 (Ramboll, 2024d).

The CMA was completed in accordance with 35 I.A.C. § 845.660 and submitted to IEPA on June 12, 2024 (Ramboll, 2024e). In accordance with 35 I.A.C. § 845.670, a semiannual report describing the progress in selecting and designing a groundwater corrective action remedy and developing a corrective action plan was submitted to IEPA on December 12, 2024 (Ramboll, 2024f).

A remedy has not yet been selected under 35 I.A.C. § 845.670 and remedial activities were not initiated under 35 I.A.C. § 845.780 in 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 2024³. 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 are attached to 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.

³ SG-04, located on the unnamed tributary, was destroyed following a rain event in October 2023; therefore, water elevation data were not recorded during 2024.

The transducer at the NE Riser malfunctioned in February 2024; therefore, water elevation data were not recorded. The transducer at the NE Riser was removed in May 2024 for repairs and was still in repair in July 2024; therefore, water elevation data were not recorded.

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

Event ID	Sampling Dates ^{1, 2, 3}	Analytical Data Receipt Date	Exceedance Determination Date	ASD Completion Date
E004	February 13-21, 2024	April 8, 2024	June 7, 2024	NA
E005	April 30 - May 7, 2024	June 17, 2024	August 16, 2024	NA
E006	July 30 - August 6, 2024	September 13, 2024	November 12, 2024	NA
E007	October 29–31, 2024	December 19, 2024	TBD ⁴	TBD

Notes:

ASD: Alternative Source Demonstration

CMA: Corrective Measures Assessment

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: G200 and R201

³ The following compliance wells were sampled for each event: G206, G206D, G209, G212, G213, G215, G217, and G218

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

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:

- Arsenic in G206D
- Sulfate in G215 and G217
- TDS in G215

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 C** 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 GSP 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 GSP. After the GMF GSP 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.
- A public meeting will be held prior to selection of a remedy in accordance with 35 I.A.C. § 845.660(d).
- A corrective action plan will be submitted to IEPA on or before June 12, 2025 as required by 35 I.A.C. § 845.670.

6. REFERENCES

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TABLES

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G200	Background	E004	02/21/2024	Antimony, total	0.001 UJ	mg/L
G200	Background	E004	02/21/2024	Arsenic, total	0.00100 J+	mg/L
G200	Background	E004	02/21/2024	Barium, total	0.0380 J	mg/L
G200	Background	E004	02/21/2024	Beryllium, total	0.0002 U	mg/L
G200	Background	E004	02/21/2024	Boron, total	0.0932 J	mg/L
G200	Background	E004	02/21/2024	Cadmium, total	0.0002 U	mg/L
G200	Background	E004	02/21/2024	Calcium, total	83.8	mg/L
G200	Background	E004	02/21/2024	Chloride, total	46.0	mg/L
G200	Background	E004	02/21/2024	Chromium, total	0.0015 UJ	mg/L
G200	Background	E004	02/21/2024	Cobalt, total	0.001 UJ	mg/L
G200	Background	E004	02/21/2024	Dissolved Oxygen	2.45	mg/L
G200	Background	E004	02/21/2024	Fluoride, total	0.320	mg/L
G200	Background	E004	02/21/2024	Lead, total	0.0006 U	mg/L
G200	Background	E004	02/21/2024	Lithium, total	0.00420 J	mg/L
G200	Background	E004	02/21/2024	Mercury, total	0.00006 U	mg/L
G200	Background	E004	02/21/2024	Molybdenum, total	0.00280 J+	mg/L
G200	Background	E004	02/21/2024	Oxidation Reduction Potential	171	mV
G200	Background	E004	02/21/2024	pH (field)	6.7	SU
G200	Background	E004	02/21/2024	Radium 226 + Radium 228, total	0.243	pCi/L
G200	Background	E004	02/21/2024	Selenium, total	0.00210	mg/L
G200	Background	E004	02/21/2024	Specific Conductance @ 25C (field)	862	micromhos/cm
G200	Background	E004	02/21/2024	Sulfate, total	109	mg/L
G200	Background	E004	02/21/2024	Temperature	11.8	degrees C
G200	Background	E004	02/21/2024	Thallium, total	0.001 U	mg/L
G200	Background	E004	02/21/2024	Total Dissolved Solids	496	mg/L
G200	Background	E004	02/21/2024	Turbidity, field	11.0	NTU
R201	Background	E004	02/20/2024	Antimony, total	0.0004 U	mg/L
R201	Background	E004	02/20/2024	Arsenic, total	0.00120 J+	mg/L
R201	Background	E004	02/20/2024	Barium, total	0.0726 J	mg/L
R201	Background	E004	02/20/2024	Beryllium, total	0.0002 U	mg/L
R201	Background	E004	02/20/2024	Boron, total	0.269	mg/L
R201	Background	E004	02/20/2024	Cadmium, total	0.001 UJ	mg/L
R201	Background	E004	02/20/2024	Calcium, total	94.6	mg/L
R201	Background	E004	02/20/2024	Chloride, total	45.0	mg/L
R201	Background	E004	02/20/2024	Chromium, total	0.00170 J+	mg/L
R201	Background	E004	02/20/2024	Cobalt, total	0.00110 J+	mg/L
R201	Background	E004	02/20/2024	Dissolved Oxygen	1.57	mg/L
R201	Background	E004	02/20/2024	Fluoride, total	0.490	mg/L
R201	Background	E004	02/20/2024	Lead, total	0.00140	mg/L
R201	Background	E004	02/20/2024	Lithium, total	0.00500	mg/L
R201	Background	E004	02/20/2024	Mercury, total	0.00006 U	mg/L
R201	Background	E004	02/20/2024	Molybdenum, total	0.00180 J+	mg/L
R201	Background	E004	02/20/2024	Oxidation Reduction Potential	147	mV
R201	Background	E004	02/20/2024	pH (field)	7.0	SU
R201	Background	E004	02/20/2024	Radium 226 + Radium 228, total	0.374	pCi/L
R201	Background	E004	02/20/2024	Selenium, total	0.00310	mg/L

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COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
R201	Background	E004	02/20/2024	Specific Conductance @ 25C (field)	971	micromhos/cm
R201	Background	E004	02/20/2024	Sulfate, total	185	mg/L
R201	Background	E004	02/20/2024	Temperature	13.9	degrees C
R201	Background	E004	02/20/2024	Thallium, total	0.001 U	mg/L
R201	Background	E004	02/20/2024	Total Dissolved Solids	555 J-	mg/L
R201	Background	E004	02/20/2024	Turbidity, field	14.0	NTU
G206	Compliance	E004	02/13/2024	Antimony, total	0.0004 U	mg/L
G206	Compliance	E004	02/13/2024	Arsenic, total	0.001 UJ	mg/L
G206	Compliance	E004	02/13/2024	Barium, total	0.0763	mg/L
G206	Compliance	E004	02/13/2024	Beryllium, total	0.0002 U	mg/L
G206	Compliance	E004	02/13/2024	Boron, total	0.0092 U	mg/L
G206	Compliance	E004	02/13/2024	Cadmium, total	0.0002 U	mg/L
G206	Compliance	E004	02/13/2024	Calcium, total	88.4	mg/L
G206	Compliance	E004	02/13/2024	Chloride, total	24.0	mg/L
G206	Compliance	E004	02/13/2024	Chromium, total	0.0012 U	mg/L
G206	Compliance	E004	02/13/2024	Cobalt, total	0.001 UJ	mg/L
G206	Compliance	E004	02/13/2024	Dissolved Oxygen	1.48	mg/L
G206	Compliance	E004	02/13/2024	Fluoride, total	0.430	mg/L
G206	Compliance	E004	02/13/2024	Lead, total	0.0006 U	mg/L
G206	Compliance	E004	02/13/2024	Lithium, total	0.0028 J	mg/L
G206	Compliance	E004	02/13/2024	Mercury, total	0.00006 U	mg/L
G206	Compliance	E004	02/13/2024	Molybdenum, total	0.0015 UJ	mg/L
G206	Compliance	E004	02/13/2024	Oxidation Reduction Potential	96.0	mV
G206	Compliance	E004	02/13/2024	pH (field)	7.2	SU
G206	Compliance	E004	02/13/2024	Radium 226 + Radium 228, total	0.5	pCi/L
G206	Compliance	E004	02/13/2024	Selenium, total	0.0006 U	mg/L
G206	Compliance	E004	02/13/2024	Specific Conductance @ 25C (field)	875	micromhos/cm
G206	Compliance	E004	02/13/2024	Sulfate, total	166	mg/L
G206	Compliance	E004	02/13/2024	Temperature	14.3	degrees C
G206	Compliance	E004	02/13/2024	Thallium, total	0.001 U	mg/L
G206	Compliance	E004	02/13/2024	Total Dissolved Solids	528	mg/L
G206	Compliance	E004	02/13/2024	Turbidity, field	4.40	NTU
G206D	Compliance	E004	02/16/2024	Antimony, total	0.0004 U	mg/L
G206D	Compliance	E004	02/16/2024	Arsenic, total	0.0184	mg/L
G206D	Compliance	E004	02/16/2024	Barium, total	0.203	mg/L
G206D	Compliance	E004	02/16/2024	Beryllium, total	0.0002 U	mg/L
G206D	Compliance	E004	02/16/2024	Boron, total	0.137 J+	mg/L
G206D	Compliance	E004	02/16/2024	Cadmium, total	0.0002 U	mg/L
G206D	Compliance	E004	02/16/2024	Calcium, total	86.6	mg/L
G206D	Compliance	E004	02/16/2024	Chloride, total	22.0	mg/L
G206D	Compliance	E004	02/16/2024	Chromium, total	0.0015 UJ	mg/L
G206D	Compliance	E004	02/16/2024	Cobalt, total	0.001 UJ	mg/L
G206D	Compliance	E004	02/16/2024	Dissolved Oxygen	2.53	mg/L
G206D	Compliance	E004	02/16/2024	Fluoride, total	0.970	mg/L
G206D	Compliance	E004	02/16/2024	Lead, total	0.0006 U	mg/L
G206D	Compliance	E004	02/16/2024	Lithium, total	0.0028 J	mg/L

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COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G206D	Compliance	E004	02/16/2024	Mercury, total	0.00008 U	mg/L
G206D	Compliance	E004	02/16/2024	Molybdenum, total	0.00760 J+	mg/L
G206D	Compliance	E004	02/16/2024	Oxidation Reduction Potential	173	mV
G206D	Compliance	E004	02/16/2024	pH (field)	6.6	SU
G206D	Compliance	E004	02/16/2024	Radium 226 + Radium 228, total	0.769	pCi/L
G206D	Compliance	E004	02/16/2024	Selenium, total	0.0006 U	mg/L
G206D	Compliance	E004	02/16/2024	Specific Conductance @ 25C (field)	1,040	micromhos/cm
G206D	Compliance	E004	02/16/2024	Sulfate, total	126	mg/L
G206D	Compliance	E004	02/16/2024	Temperature	11.7	degrees C
G206D	Compliance	E004	02/16/2024	Thallium, total	0.001 U	mg/L
G206D	Compliance	E004	02/16/2024	Total Dissolved Solids	630	mg/L
G206D	Compliance	E004	02/16/2024	Turbidity, field	6.30	NTU
G209	Compliance	E004	02/13/2024	Antimony, total	0.001 UJ	mg/L
G209	Compliance	E004	02/13/2024	Arsenic, total	0.00130 J+	mg/L
G209	Compliance	E004	02/13/2024	Barium, total	0.0702	mg/L
G209	Compliance	E004	02/13/2024	Beryllium, total	0.0002 U	mg/L
G209	Compliance	E004	02/13/2024	Boron, total	0.0300 J+	mg/L
G209	Compliance	E004	02/13/2024	Cadmium, total	0.0002 U	mg/L
G209	Compliance	E004	02/13/2024	Calcium, total	143	mg/L
G209	Compliance	E004	02/13/2024	Chloride, total	59.0	mg/L
G209	Compliance	E004	02/13/2024	Chromium, total	0.0015 UJ	mg/L
G209	Compliance	E004	02/13/2024	Cobalt, total	0.001 UJ	mg/L
G209	Compliance	E004	02/13/2024	Dissolved Oxygen	1.65	mg/L
G209	Compliance	E004	02/13/2024	Fluoride, total	0.470	mg/L
G209	Compliance	E004	02/13/2024	Lead, total	0.0006 U	mg/L
G209	Compliance	E004	02/13/2024	Lithium, total	0.00520	mg/L
G209	Compliance	E004	02/13/2024	Mercury, total	0.00006 U	mg/L
G209	Compliance	E004	02/13/2024	Molybdenum, total	0.00310 J+	mg/L
G209	Compliance	E004	02/13/2024	Oxidation Reduction Potential	139	mV
G209	Compliance	E004	02/13/2024	pH (field)	6.8	SU
G209	Compliance	E004	02/13/2024	Radium 226 + Radium 228, total	0.481	pCi/L
G209	Compliance	E004	02/13/2024	Selenium, total	0.0006 U	mg/L
G209	Compliance	E004	02/13/2024	Specific Conductance @ 25C (field)	1,280	micromhos/cm
G209	Compliance	E004	02/13/2024	Sulfate, total	251	mg/L
G209	Compliance	E004	02/13/2024	Temperature	13.6	degrees C
G209	Compliance	E004	02/13/2024	Thallium, total	0.001 U	mg/L
G209	Compliance	E004	02/13/2024	Total Dissolved Solids	798	mg/L
G209	Compliance	E004	02/13/2024	Turbidity, field	6.90	NTU
G212	Compliance	E004	02/14/2024	Antimony, total	0.0004 U	mg/L
G212	Compliance	E004	02/14/2024	Arsenic, total	0.001 UJ	mg/L
G212	Compliance	E004	02/14/2024	Barium, total	0.0549	mg/L
G212	Compliance	E004	02/14/2024	Beryllium, total	0.0002 U	mg/L
G212	Compliance	E004	02/14/2024	Boron, total	0.0092 U	mg/L
G212	Compliance	E004	02/14/2024	Cadmium, total	0.001 UJ	mg/L
G212	Compliance	E004	02/14/2024	Calcium, total	56.3	mg/L
G212	Compliance	E004	02/14/2024	Chloride, total	48.0	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024
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COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G212	Compliance	E004	02/14/2024	Chromium, total	0.0015 UJ	mg/L
G212	Compliance	E004	02/14/2024	Cobalt, total	0.0001 U	mg/L
G212	Compliance	E004	02/14/2024	Dissolved Oxygen	4.26	mg/L
G212	Compliance	E004	02/14/2024	Fluoride, total	0.320	mg/L
G212	Compliance	E004	02/14/2024	Lead, total	0.0006 U	mg/L
G212	Compliance	E004	02/14/2024	Lithium, total	0.0021 J	mg/L
G212	Compliance	E004	02/14/2024	Mercury, total	0.00006 U	mg/L
G212	Compliance	E004	02/14/2024	Molybdenum, total	0.0006 U	mg/L
G212	Compliance	E004	02/14/2024	Oxidation Reduction Potential	152	mV
G212	Compliance	E004	02/14/2024	pH (field)	7.1	SU
G212	Compliance	E004	02/14/2024	Radium 226 + Radium 228, total	0.632	pCi/L
G212	Compliance	E004	02/14/2024	Selenium, total	0.00120	mg/L
G212	Compliance	E004	02/14/2024	Specific Conductance @ 25C (field)	736	micromhos/cm
G212	Compliance	E004	02/14/2024	Sulfate, total	59.0	mg/L
G212	Compliance	E004	02/14/2024	Temperature	13.9	degrees C
G212	Compliance	E004	02/14/2024	Thallium, total	0.001 U	mg/L
G212	Compliance	E004	02/14/2024	Total Dissolved Solids	412	mg/L
G212	Compliance	E004	02/14/2024	Turbidity, field	3.40	NTU
G213	Compliance	E004	02/14/2024	Antimony, total	0.0004 U	mg/L
G213	Compliance	E004	02/14/2024	Arsenic, total	0.001 UJ	mg/L
G213	Compliance	E004	02/14/2024	Barium, total	0.0622	mg/L
G213	Compliance	E004	02/14/2024	Beryllium, total	0.0002 U	mg/L
G213	Compliance	E004	02/14/2024	Boron, total	0.0092 U	mg/L
G213	Compliance	E004	02/14/2024	Cadmium, total	0.0002 U	mg/L
G213	Compliance	E004	02/14/2024	Calcium, total	74.3	mg/L
G213	Compliance	E004	02/14/2024	Chloride, total	53.0	mg/L
G213	Compliance	E004	02/14/2024	Chromium, total	0.00410 J+	mg/L
G213	Compliance	E004	02/14/2024	Cobalt, total	0.001 UJ	mg/L
G213	Compliance	E004	02/14/2024	Dissolved Oxygen	4.92	mg/L
G213	Compliance	E004	02/14/2024	Fluoride, total	0.340	mg/L
G213	Compliance	E004	02/14/2024	Lead, total	0.00120	mg/L
G213	Compliance	E004	02/14/2024	Lithium, total	0.00380	mg/L
G213	Compliance	E004	02/14/2024	Mercury, total	0.00006 U	mg/L
G213	Compliance	E004	02/14/2024	Molybdenum, total	0.0006 U	mg/L
G213	Compliance	E004	02/14/2024	Oxidation Reduction Potential	157	mV
G213	Compliance	E004	02/14/2024	pH (field)	7.0	SU
G213	Compliance	E004	02/14/2024	Radium 226 + Radium 228, total	0.263	pCi/L
G213	Compliance	E004	02/14/2024	Selenium, total	0.0007 J	mg/L
G213	Compliance	E004	02/14/2024	Specific Conductance @ 25C (field)	723	micromhos/cm
G213	Compliance	E004	02/14/2024	Sulfate, total	70.0	mg/L
G213	Compliance	E004	02/14/2024	Temperature	13.7	degrees C
G213	Compliance	E004	02/14/2024	Thallium, total	0.001 U	mg/L
G213	Compliance	E004	02/14/2024	Total Dissolved Solids	412	mg/L
G213	Compliance	E004	02/14/2024	Turbidity, field	12.0	NTU
G215	Compliance	E004	02/13/2024	Antimony, total	0.0004 U	mg/L
G215	Compliance	E004	02/13/2024	Arsenic, total	0.00210 J+	mg/L

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845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G215	Compliance	E004	02/13/2024	Barium, total	0.0458	mg/L
G215	Compliance	E004	02/13/2024	Beryllium, total	0.0002 U	mg/L
G215	Compliance	E004	02/13/2024	Boron, total	0.809	mg/L
G215	Compliance	E004	02/13/2024	Cadmium, total	0.0002 U	mg/L
G215	Compliance	E004	02/13/2024	Calcium, total	186	mg/L
G215	Compliance	E004	02/13/2024	Chloride, total	157	mg/L
G215	Compliance	E004	02/13/2024	Chromium, total	0.0015 UJ	mg/L
G215	Compliance	E004	02/13/2024	Cobalt, total	0.001 UJ	mg/L
G215	Compliance	E004	02/13/2024	Dissolved Oxygen	1.61	mg/L
G215	Compliance	E004	02/13/2024	Fluoride, total	0.300	mg/L
G215	Compliance	E004	02/13/2024	Lead, total	0.0006 U	mg/L
G215	Compliance	E004	02/13/2024	Lithium, total	0.00870	mg/L
G215	Compliance	E004	02/13/2024	Mercury, total	0.00006 U	mg/L
G215	Compliance	E004	02/13/2024	Molybdenum, total	0.0015 UJ	mg/L
G215	Compliance	E004	02/13/2024	Oxidation Reduction Potential	122	mV
G215	Compliance	E004	02/13/2024	pH (field)	6.8	SU
G215	Compliance	E004	02/13/2024	Radium 226 + Radium 228, total	1.02	pCi/L
G215	Compliance	E004	02/13/2024	Selenium, total	0.0006 U	mg/L
G215	Compliance	E004	02/13/2024	Specific Conductance @ 25C (field)	2,020	micromhos/cm
G215	Compliance	E004	02/13/2024	Sulfate, total	566	mg/L
G215	Compliance	E004	02/13/2024	Temperature	14.1	degrees C
G215	Compliance	E004	02/13/2024	Thallium, total	0.001 U	mg/L
G215	Compliance	E004	02/13/2024	Total Dissolved Solids	1,260	mg/L
G215	Compliance	E004	02/13/2024	Turbidity, field	10.0	NTU
G217	Compliance	E004	02/13/2024	Antimony, total	0.0004 U	mg/L
G217	Compliance	E004	02/13/2024	Arsenic, total	0.0004 U	mg/L
G217	Compliance	E004	02/13/2024	Barium, total	0.0898	mg/L
G217	Compliance	E004	02/13/2024	Beryllium, total	0.0002 U	mg/L
G217	Compliance	E004	02/13/2024	Boron, total	0.0243 J+	mg/L
G217	Compliance	E004	02/13/2024	Cadmium, total	0.0002 U	mg/L
G217	Compliance	E004	02/13/2024	Calcium, total	180	mg/L
G217	Compliance	E004	02/13/2024	Chloride, total	125	mg/L
G217	Compliance	E004	02/13/2024	Chromium, total	0.0012 U	mg/L
G217	Compliance	E004	02/13/2024	Cobalt, total	0.001 UJ	mg/L
G217	Compliance	E004	02/13/2024	Dissolved Oxygen	1.56	mg/L
G217	Compliance	E004	02/13/2024	Fluoride, total	0.350	mg/L
G217	Compliance	E004	02/13/2024	Lead, total	0.0006 U	mg/L
G217	Compliance	E004	02/13/2024	Lithium, total	0.00370	mg/L
G217	Compliance	E004	02/13/2024	Mercury, total	0.00006 U	mg/L
G217	Compliance	E004	02/13/2024	Molybdenum, total	0.0006 U	mg/L
G217	Compliance	E004	02/13/2024	Oxidation Reduction Potential	129	mV
G217	Compliance	E004	02/13/2024	pH (field)	6.8	SU
G217	Compliance	E004	02/13/2024	Radium 226 + Radium 228, total	0.692	pCi/L
G217	Compliance	E004	02/13/2024	Selenium, total	0.0006 U	mg/L
G217	Compliance	E004	02/13/2024	Specific Conductance @ 25C (field)	1,590	micromhos/cm
G217	Compliance	E004	02/13/2024	Sulfate, total	428	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G217	Compliance	E004	02/13/2024	Temperature	14.2	degrees C
G217	Compliance	E004	02/13/2024	Thallium, total	0.001 U	mg/L
G217	Compliance	E004	02/13/2024	Total Dissolved Solids	950	mg/L
G217	Compliance	E004	02/13/2024	Turbidity, field	11.0	NTU
G218	Compliance	E004	02/13/2024	Antimony, total	0.0004 U	mg/L
G218	Compliance	E004	02/13/2024	Arsenic, total	0.00190 J+	mg/L
G218	Compliance	E004	02/13/2024	Barium, total	0.0750	mg/L
G218	Compliance	E004	02/13/2024	Beryllium, total	0.0002 U	mg/L
G218	Compliance	E004	02/13/2024	Boron, total	0.02 UJ	mg/L
G218	Compliance	E004	02/13/2024	Cadmium, total	0.0002 U	mg/L
G218	Compliance	E004	02/13/2024	Calcium, total	169	mg/L
G218	Compliance	E004	02/13/2024	Chloride, total	119	mg/L
G218	Compliance	E004	02/13/2024	Chromium, total	0.00230 J+	mg/L
G218	Compliance	E004	02/13/2024	Cobalt, total	0.001 UJ	mg/L
G218	Compliance	E004	02/13/2024	Dissolved Oxygen	1.69	mg/L
G218	Compliance	E004	02/13/2024	Fluoride, total	0.300	mg/L
G218	Compliance	E004	02/13/2024	Lead, total	0.0007 J	mg/L
G218	Compliance	E004	02/13/2024	Lithium, total	0.00450	mg/L
G218	Compliance	E004	02/13/2024	Mercury, total	0.00006 U	mg/L
G218	Compliance	E004	02/13/2024	Molybdenum, total	0.0006 U	mg/L
G218	Compliance	E004	02/13/2024	Oxidation Reduction Potential	125	mV
G218	Compliance	E004	02/13/2024	pH (field)	6.9	SU
G218	Compliance	E004	02/13/2024	Radium 226 + Radium 228, total	0.422	pCi/L
G218	Compliance	E004	02/13/2024	Selenium, total	0.0006 U	mg/L
G218	Compliance	E004	02/13/2024	Specific Conductance @ 25C (field)	1,560	micromhos/cm
G218	Compliance	E004	02/13/2024	Sulfate, total	396	mg/L
G218	Compliance	E004	02/13/2024	Temperature	14.2	degrees C
G218	Compliance	E004	02/13/2024	Thallium, total	0.001 U	mg/L
G218	Compliance	E004	02/13/2024	Total Dissolved Solids	835	mg/L
G218	Compliance	E004	02/13/2024	Turbidity, field	20.0	NTU

Notes:
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 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.
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 2, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G200	Background	E005	05/07/2024	Antimony, total	0.0008 U	mg/L
G200	Background	E005	05/07/2024	Arsenic, total	0.00150	mg/L
G200	Background	E005	05/07/2024	Barium, total	0.0539	mg/L
G200	Background	E005	05/07/2024	Beryllium, total	0.0002 U	mg/L
G200	Background	E005	05/07/2024	Boron, total	0.011 J	mg/L
G200	Background	E005	05/07/2024	Cadmium, total	0.0002 U	mg/L
G200	Background	E005	05/07/2024	Calcium, total	94.3	mg/L
G200	Background	E005	05/07/2024	Chloride, total	61.0	mg/L
G200	Background	E005	05/07/2024	Chromium, total	0.00200 J+	mg/L
G200	Background	E005	05/07/2024	Cobalt, total	0.0007 J	mg/L
G200	Background	E005	05/07/2024	Dissolved Oxygen	0.130	mg/L
G200	Background	E005	05/07/2024	Fluoride, total	0.360	mg/L
G200	Background	E005	05/07/2024	Lead, total	0.00100 J	mg/L
G200	Background	E005	05/07/2024	Lithium, total	0.00570	mg/L
G200	Background	E005	05/07/2024	Mercury, total	0.00006 U	mg/L
G200	Background	E005	05/07/2024	Molybdenum, total	0.00240	mg/L
G200	Background	E005	05/07/2024	Oxidation Reduction Potential	6.00	mV
G200	Background	E005	05/07/2024	pH (field)	7.2	SU
G200	Background	E005	05/07/2024	Radium 226 + Radium 228, total	0.0864	pCi/L
G200	Background	E005	05/07/2024	Selenium, total	0.00440 J+	mg/L
G200	Background	E005	05/07/2024	Specific Conductance @ 25C (field)	850	micromhos/cm
G200	Background	E005	05/07/2024	Sulfate, total	110 J-	mg/L
G200	Background	E005	05/07/2024	Temperature	17.3	degrees C
G200	Background	E005	05/07/2024	Thallium, total	0.0012 J	mg/L
G200	Background	E005	05/07/2024	Total Dissolved Solids	534	mg/L
G200	Background	E005	05/07/2024	Turbidity, field	53.0	NTU
R201	Background	E005	05/07/2024	Antimony, total	0.0008 U	mg/L
R201	Background	E005	05/07/2024	Arsenic, total	0.00110	mg/L
R201	Background	E005	05/07/2024	Barium, total	0.0619	mg/L
R201	Background	E005	05/07/2024	Beryllium, total	0.0002 U	mg/L
R201	Background	E005	05/07/2024	Boron, total	0.01 J	mg/L
R201	Background	E005	05/07/2024	Cadmium, total	0.0002 U	mg/L
R201	Background	E005	05/07/2024	Calcium, total	107	mg/L
R201	Background	E005	05/07/2024	Chloride, total	51.0	mg/L
R201	Background	E005	05/07/2024	Chromium, total	0.0007 U	mg/L
R201	Background	E005	05/07/2024	Cobalt, total	0.0007 J	mg/L
R201	Background	E005	05/07/2024	Dissolved Oxygen	2.05	mg/L
R201	Background	E005	05/07/2024	Fluoride, total	0.360	mg/L
R201	Background	E005	05/07/2024	Lead, total	0.0006 U	mg/L
R201	Background	E005	05/07/2024	Lithium, total	0.00300 J	mg/L
R201	Background	E005	05/07/2024	Mercury, total	0.00006 U	mg/L
R201	Background	E005	05/07/2024	Molybdenum, total	0.0009 U	mg/L
R201	Background	E005	05/07/2024	Oxidation Reduction Potential	-14.0	mV
R201	Background	E005	05/07/2024	pH (field)	7.0	SU
R201	Background	E005	05/07/2024	Radium 226 + Radium 228, total	0.817	pCi/L
R201	Background	E005	05/07/2024	Selenium, total	0.0006 U	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
R201	Background	E005	05/07/2024	Specific Conductance @ 25C (field)	986	micromhos/cm
R201	Background	E005	05/07/2024	Sulfate, total	155	mg/L
R201	Background	E005	05/07/2024	Temperature	16.2	degrees C
R201	Background	E005	05/07/2024	Thallium, total	0.001 U	mg/L
R201	Background	E005	05/07/2024	Total Dissolved Solids	668	mg/L
R201	Background	E005	05/07/2024	Turbidity, field	6.80	NTU
G206	Compliance	E005	04/30/2024	Antimony, total	0.0004 U	mg/L
G206	Compliance	E005	04/30/2024	Arsenic, total	0.00110	mg/L
G206	Compliance	E005	04/30/2024	Barium, total	0.0784	mg/L
G206	Compliance	E005	04/30/2024	Beryllium, total	0.0002 U	mg/L
G206	Compliance	E005	04/30/2024	Boron, total	0.0092 U	mg/L
G206	Compliance	E005	04/30/2024	Cadmium, total	0.0002 U	mg/L
G206	Compliance	E005	04/30/2024	Calcium, total	94.1	mg/L
G206	Compliance	E005	04/30/2024	Chloride, total	23.0	mg/L
G206	Compliance	E005	04/30/2024	Chromium, total	0.00230 J+	mg/L
G206	Compliance	E005	04/30/2024	Cobalt, total	0.0007 J	mg/L
G206	Compliance	E005	04/30/2024	Dissolved Oxygen	1.71	mg/L
G206	Compliance	E005	04/30/2024	Fluoride, total	0.400	mg/L
G206	Compliance	E005	04/30/2024	Lead, total	0.0006 U	mg/L
G206	Compliance	E005	04/30/2024	Lithium, total	0.0027 J	mg/L
G206	Compliance	E005	04/30/2024	Mercury, total	0.00006 U	mg/L
G206	Compliance	E005	04/30/2024	Molybdenum, total	0.00180	mg/L
G206	Compliance	E005	04/30/2024	Oxidation Reduction Potential	-37.0	mV
G206	Compliance	E005	04/30/2024	pH (field)	7.1	SU
G206	Compliance	E005	04/30/2024	Radium 226 + Radium 228, total	0.266	pCi/L
G206	Compliance	E005	04/30/2024	Selenium, total	0.0006 U	mg/L
G206	Compliance	E005	04/30/2024	Specific Conductance @ 25C (field)	858	micromhos/cm
G206	Compliance	E005	04/30/2024	Sulfate, total	179	mg/L
G206	Compliance	E005	04/30/2024	Temperature	15.1	degrees C
G206	Compliance	E005	04/30/2024	Thallium, total	0.001 U	mg/L
G206	Compliance	E005	04/30/2024	Total Dissolved Solids	550	mg/L
G206	Compliance	E005	04/30/2024	Turbidity, field	13.0	NTU
G206D	Compliance	E005	04/30/2024	Antimony, total	0.0004 U	mg/L
G206D	Compliance	E005	04/30/2024	Arsenic, total	0.0119	mg/L
G206D	Compliance	E005	04/30/2024	Barium, total	0.269	mg/L
G206D	Compliance	E005	04/30/2024	Beryllium, total	0.0002 U	mg/L
G206D	Compliance	E005	04/30/2024	Boron, total	0.121	mg/L
G206D	Compliance	E005	04/30/2024	Cadmium, total	0.0002 U	mg/L
G206D	Compliance	E005	04/30/2024	Calcium, total	82.0	mg/L
G206D	Compliance	E005	04/30/2024	Chloride, total	19.0	mg/L
G206D	Compliance	E005	04/30/2024	Chromium, total	0.00240 J+	mg/L
G206D	Compliance	E005	04/30/2024	Cobalt, total	0.0005 J	mg/L
G206D	Compliance	E005	04/30/2024	Dissolved Oxygen	0.710	mg/L
G206D	Compliance	E005	04/30/2024	Fluoride, total	0.950	mg/L
G206D	Compliance	E005	04/30/2024	Lead, total	0.0006 U	mg/L
G206D	Compliance	E005	04/30/2024	Lithium, total	0.00300	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G206D	Compliance	E005	04/30/2024	Mercury, total	0.00006 U	mg/L
G206D	Compliance	E005	04/30/2024	Molybdenum, total	0.0115	mg/L
G206D	Compliance	E005	04/30/2024	Oxidation Reduction Potential	-104	mV
G206D	Compliance	E005	04/30/2024	pH (field)	7.3	SU
G206D	Compliance	E005	04/30/2024	Radium 226 + Radium 228, total	0.33	pCi/L
G206D	Compliance	E005	04/30/2024	Selenium, total	0.0006 U	mg/L
G206D	Compliance	E005	04/30/2024	Specific Conductance @ 25C (field)	982	micromhos/cm
G206D	Compliance	E005	04/30/2024	Sulfate, total	120	mg/L
G206D	Compliance	E005	04/30/2024	Temperature	15.9	degrees C
G206D	Compliance	E005	04/30/2024	Thallium, total	0.001 U	mg/L
G206D	Compliance	E005	04/30/2024	Total Dissolved Solids	630	mg/L
G206D	Compliance	E005	04/30/2024	Turbidity, field	13.0	NTU
G209	Compliance	E005	05/01/2024	Antimony, total	0.0009 J	mg/L
G209	Compliance	E005	05/01/2024	Arsenic, total	0.00150	mg/L
G209	Compliance	E005	05/01/2024	Barium, total	0.0750	mg/L
G209	Compliance	E005	05/01/2024	Beryllium, total	0.0002 U	mg/L
G209	Compliance	E005	05/01/2024	Boron, total	0.0092 U	mg/L
G209	Compliance	E005	05/01/2024	Cadmium, total	0.0002 U	mg/L
G209	Compliance	E005	05/01/2024	Calcium, total	159	mg/L
G209	Compliance	E005	05/01/2024	Chloride, total	59.0	mg/L
G209	Compliance	E005	05/01/2024	Chromium, total	0.00160 J+	mg/L
G209	Compliance	E005	05/01/2024	Cobalt, total	0.0005 J	mg/L
G209	Compliance	E005	05/01/2024	Dissolved Oxygen	0.870	mg/L
G209	Compliance	E005	05/01/2024	Fluoride, total	0.520	mg/L
G209	Compliance	E005	05/01/2024	Lead, total	0.0006 U	mg/L
G209	Compliance	E005	05/01/2024	Lithium, total	0.00500	mg/L
G209	Compliance	E005	05/01/2024	Mercury, total	0.00006 U	mg/L
G209	Compliance	E005	05/01/2024	Molybdenum, total	0.00330	mg/L
G209	Compliance	E005	05/01/2024	Oxidation Reduction Potential	-7.00	mV
G209	Compliance	E005	05/01/2024	pH (field)	7.0	SU
G209	Compliance	E005	05/01/2024	Radium 226 + Radium 228, total	0.653	pCi/L
G209	Compliance	E005	05/01/2024	Selenium, total	0.0006 U	mg/L
G209	Compliance	E005	05/01/2024	Specific Conductance @ 25C (field)	1,540	micromhos/cm
G209	Compliance	E005	05/01/2024	Sulfate, total	233	mg/L
G209	Compliance	E005	05/01/2024	Temperature	13.9	degrees C
G209	Compliance	E005	05/01/2024	Thallium, total	0.001 U	mg/L
G209	Compliance	E005	05/01/2024	Total Dissolved Solids	924	mg/L
G209	Compliance	E005	05/01/2024	Turbidity, field	11.0	NTU
G212	Compliance	E005	05/01/2024	Antimony, total	0.0005 U	mg/L
G212	Compliance	E005	05/01/2024	Arsenic, total	0.0004 U	mg/L
G212	Compliance	E005	05/01/2024	Barium, total	0.0549	mg/L
G212	Compliance	E005	05/01/2024	Beryllium, total	0.0002 U	mg/L
G212	Compliance	E005	05/01/2024	Boron, total	0.0092 U	mg/L
G212	Compliance	E005	05/01/2024	Cadmium, total	0.0002 U	mg/L
G212	Compliance	E005	05/01/2024	Calcium, total	59.0	mg/L
G212	Compliance	E005	05/01/2024	Chloride, total	44.0	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G212	Compliance	E005	05/01/2024	Chromium, total	0.0015 UJ	mg/L
G212	Compliance	E005	05/01/2024	Cobalt, total	0.0001 U	mg/L
G212	Compliance	E005	05/01/2024	Dissolved Oxygen	1.24	mg/L
G212	Compliance	E005	05/01/2024	Fluoride, total	0.320	mg/L
G212	Compliance	E005	05/01/2024	Lead, total	0.0006 U	mg/L
G212	Compliance	E005	05/01/2024	Lithium, total	0.0017 J	mg/L
G212	Compliance	E005	05/01/2024	Mercury, total	0.00006 U	mg/L
G212	Compliance	E005	05/01/2024	Molybdenum, total	0.0006 U	mg/L
G212	Compliance	E005	05/01/2024	Oxidation Reduction Potential	133	mV
G212	Compliance	E005	05/01/2024	pH (field)	7.2	SU
G212	Compliance	E005	05/01/2024	Radium 226 + Radium 228, total	1.07	pCi/L
G212	Compliance	E005	05/01/2024	Selenium, total	0.00100 J+	mg/L
G212	Compliance	E005	05/01/2024	Specific Conductance @ 25C (field)	681	micromhos/cm
G212	Compliance	E005	05/01/2024	Sulfate, total	58.0	mg/L
G212	Compliance	E005	05/01/2024	Temperature	14.6	degrees C
G212	Compliance	E005	05/01/2024	Thallium, total	0.001 U	mg/L
G212	Compliance	E005	05/01/2024	Total Dissolved Solids	470	mg/L
G212	Compliance	E005	05/01/2024	Turbidity, field	4.60	NTU
G213	Compliance	E005	05/06/2024	Antimony, total	0.0006 U	mg/L
G213	Compliance	E005	05/06/2024	Arsenic, total	0.00130	mg/L
G213	Compliance	E005	05/06/2024	Barium, total	0.0578	mg/L
G213	Compliance	E005	05/06/2024	Beryllium, total	0.0002 U	mg/L
G213	Compliance	E005	05/06/2024	Boron, total	0.0092 U	mg/L
G213	Compliance	E005	05/06/2024	Cadmium, total	0.0002 U	mg/L
G213	Compliance	E005	05/06/2024	Calcium, total	69.5	mg/L
G213	Compliance	E005	05/06/2024	Chloride, total	55.0	mg/L
G213	Compliance	E005	05/06/2024	Chromium, total	0.00440 J+	mg/L
G213	Compliance	E005	05/06/2024	Cobalt, total	0.0008 J	mg/L
G213	Compliance	E005	05/06/2024	Dissolved Oxygen	0.900	mg/L
G213	Compliance	E005	05/06/2024	Fluoride, total	0.340	mg/L
G213	Compliance	E005	05/06/2024	Lead, total	0.00140	mg/L
G213	Compliance	E005	05/06/2024	Lithium, total	0.00420	mg/L
G213	Compliance	E005	05/06/2024	Mercury, total	0.00006 U	mg/L
G213	Compliance	E005	05/06/2024	Molybdenum, total	0.00150 J	mg/L
G213	Compliance	E005	05/06/2024	Oxidation Reduction Potential	64.0	mV
G213	Compliance	E005	05/06/2024	pH (field)	7.1	SU
G213	Compliance	E005	05/06/2024	Radium 226 + Radium 228, total	0.719	pCi/L
G213	Compliance	E005	05/06/2024	Selenium, total	0.00110 J+	mg/L
G213	Compliance	E005	05/06/2024	Specific Conductance @ 25C (field)	668	micromhos/cm
G213	Compliance	E005	05/06/2024	Sulfate, total	74.0	mg/L
G213	Compliance	E005	05/06/2024	Temperature	15.4	degrees C
G213	Compliance	E005	05/06/2024	Thallium, total	0.001 U	mg/L
G213	Compliance	E005	05/06/2024	Total Dissolved Solids	390	mg/L
G213	Compliance	E005	05/06/2024	Turbidity, field	32.0	NTU
G215	Compliance	E005	04/30/2024	Antimony, total	0.0004 U	mg/L
G215	Compliance	E005	04/30/2024	Arsenic, total	0.00220	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G215	Compliance	E005	04/30/2024	Barium, total	0.0356	mg/L
G215	Compliance	E005	04/30/2024	Beryllium, total	0.0002 U	mg/L
G215	Compliance	E005	04/30/2024	Boron, total	0.886	mg/L
G215	Compliance	E005	04/30/2024	Cadmium, total	0.0002 U	mg/L
G215	Compliance	E005	04/30/2024	Calcium, total	181	mg/L
G215	Compliance	E005	04/30/2024	Chloride, total	149	mg/L
G215	Compliance	E005	04/30/2024	Chromium, total	0.0007 U	mg/L
G215	Compliance	E005	04/30/2024	Cobalt, total	0.0006 J	mg/L
G215	Compliance	E005	04/30/2024	Dissolved Oxygen	0.690	mg/L
G215	Compliance	E005	04/30/2024	Fluoride, total	0.320	mg/L
G215	Compliance	E005	04/30/2024	Lead, total	0.0006 U	mg/L
G215	Compliance	E005	04/30/2024	Lithium, total	0.00910	mg/L
G215	Compliance	E005	04/30/2024	Mercury, total	0.00006 U	mg/L
G215	Compliance	E005	04/30/2024	Molybdenum, total	0.0006 U	mg/L
G215	Compliance	E005	04/30/2024	Oxidation Reduction Potential	-8.00	mV
G215	Compliance	E005	04/30/2024	pH (field)	6.9	SU
G215	Compliance	E005	04/30/2024	Radium 226 + Radium 228, total	0.201	pCi/L
G215	Compliance	E005	04/30/2024	Selenium, total	0.0006 U	mg/L
G215	Compliance	E005	04/30/2024	Specific Conductance @ 25C (field)	1,910	micromhos/cm
G215	Compliance	E005	04/30/2024	Sulfate, total	555	mg/L
G215	Compliance	E005	04/30/2024	Temperature	15.1	degrees C
G215	Compliance	E005	04/30/2024	Thallium, total	0.001 U	mg/L
G215	Compliance	E005	04/30/2024	Total Dissolved Solids	1,370	mg/L
G215	Compliance	E005	04/30/2024	Turbidity, field	10.0	NTU
G217	Compliance	E005	05/02/2024	Antimony, total	0.0006 U	mg/L
G217	Compliance	E005	05/02/2024	Arsenic, total	0.0005 J	mg/L
G217	Compliance	E005	05/02/2024	Barium, total	0.0828	mg/L
G217	Compliance	E005	05/02/2024	Beryllium, total	0.0002 U	mg/L
G217	Compliance	E005	05/02/2024	Boron, total	0.0270	mg/L
G217	Compliance	E005	05/02/2024	Cadmium, total	0.0002 U	mg/L
G217	Compliance	E005	05/02/2024	Calcium, total	211	mg/L
G217	Compliance	E005	05/02/2024	Chloride, total	131	mg/L
G217	Compliance	E005	05/02/2024	Chromium, total	0.00160 J+	mg/L
G217	Compliance	E005	05/02/2024	Cobalt, total	0.0004 J	mg/L
G217	Compliance	E005	05/02/2024	Dissolved Oxygen	0.760	mg/L
G217	Compliance	E005	05/02/2024	Fluoride, total	0.410	mg/L
G217	Compliance	E005	05/02/2024	Lead, total	0.0006 U	mg/L
G217	Compliance	E005	05/02/2024	Lithium, total	0.00370	mg/L
G217	Compliance	E005	05/02/2024	Mercury, total	0.00006 U	mg/L
G217	Compliance	E005	05/02/2024	Molybdenum, total	0.001 J	mg/L
G217	Compliance	E005	05/02/2024	Oxidation Reduction Potential	13.0	mV
G217	Compliance	E005	05/02/2024	pH (field)	6.9	SU
G217	Compliance	E005	05/02/2024	Radium 226 + Radium 228, total	0.336	pCi/L
G217	Compliance	E005	05/02/2024	Selenium, total	0.0006 U	mg/L
G217	Compliance	E005	05/02/2024	Specific Conductance @ 25C (field)	1,560	micromhos/cm
G217	Compliance	E005	05/02/2024	Sulfate, total	460	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G217	Compliance	E005	05/02/2024	Temperature	15.6	degrees C
G217	Compliance	E005	05/02/2024	Thallium, total	0.001 U	mg/L
G217	Compliance	E005	05/02/2024	Total Dissolved Solids	1,160	mg/L
G217	Compliance	E005	05/02/2024	Turbidity, field	4.50	NTU
G218	Compliance	E005	05/02/2024	Antimony, total	0.0006 U	mg/L
G218	Compliance	E005	05/02/2024	Arsenic, total	0.00180	mg/L
G218	Compliance	E005	05/02/2024	Barium, total	0.0762	mg/L
G218	Compliance	E005	05/02/2024	Beryllium, total	0.0002 U	mg/L
G218	Compliance	E005	05/02/2024	Boron, total	0.015 J	mg/L
G218	Compliance	E005	05/02/2024	Cadmium, total	0.0002 U	mg/L
G218	Compliance	E005	05/02/2024	Calcium, total	190	mg/L
G218	Compliance	E005	05/02/2024	Chloride, total	122	mg/L
G218	Compliance	E005	05/02/2024	Chromium, total	0.00310 J+	mg/L
G218	Compliance	E005	05/02/2024	Cobalt, total	0.0006 J	mg/L
G218	Compliance	E005	05/02/2024	Dissolved Oxygen	0.630	mg/L
G218	Compliance	E005	05/02/2024	Fluoride, total	0.320	mg/L
G218	Compliance	E005	05/02/2024	Lead, total	0.0007 J	mg/L
G218	Compliance	E005	05/02/2024	Lithium, total	0.00480	mg/L
G218	Compliance	E005	05/02/2024	Mercury, total	0.00006 U	mg/L
G218	Compliance	E005	05/02/2024	Molybdenum, total	0.0006 J	mg/L
G218	Compliance	E005	05/02/2024	Oxidation Reduction Potential	-21.0	mV
G218	Compliance	E005	05/02/2024	pH (field)	6.9	SU
G218	Compliance	E005	05/02/2024	Radium 226 + Radium 228, total	0.311	pCi/L
G218	Compliance	E005	05/02/2024	Selenium, total	0.0006 U	mg/L
G218	Compliance	E005	05/02/2024	Specific Conductance @ 25C (field)	1,520	micromhos/cm
G218	Compliance	E005	05/02/2024	Sulfate, total	423	mg/L
G218	Compliance	E005	05/02/2024	Temperature	15.7	degrees C
G218	Compliance	E005	05/02/2024	Thallium, total	0.001 U	mg/L
G218	Compliance	E005	05/02/2024	Total Dissolved Solids	1,100	mg/L
G218	Compliance	E005	05/02/2024	Turbidity, field	26.0	NTU

Notes:
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 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.
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 3, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G200	Background	E006	08/06/2024	Antimony, total	0.00100 J	mg/L
G200	Background	E006	08/06/2024	Arsenic, total	0.0004 U	mg/L
G200	Background	E006	08/06/2024	Barium, total	0.0529	mg/L
G200	Background	E006	08/06/2024	Beryllium, total	0.0002 U	mg/L
G200	Background	E006	08/06/2024	Boron, total	0.0092 U	mg/L
G200	Background	E006	08/06/2024	Cadmium, total	0.0002 U	mg/L
G200	Background	E006	08/06/2024	Calcium, total	84.5	mg/L
G200	Background	E006	08/06/2024	Chloride, total	62.0	mg/L
G200	Background	E006	08/06/2024	Chromium, total	0.0007 U	mg/L
G200	Background	E006	08/06/2024	Cobalt, total	0.0001 U	mg/L
G200	Background	E006	08/06/2024	Dissolved Oxygen	1.03	mg/L
G200	Background	E006	08/06/2024	Fluoride, total	0.32 J	mg/L
G200	Background	E006	08/06/2024	Lead, total	0.0006 U	mg/L
G200	Background	E006	08/06/2024	Lithium, total	0.00460	mg/L
G200	Background	E006	08/06/2024	Mercury, total	0.00006 U	mg/L
G200	Background	E006	08/06/2024	Molybdenum, total	0.0006 U	mg/L
G200	Background	E006	08/06/2024	Oxidation Reduction Potential	-65.0	mV
G200	Background	E006	08/06/2024	pH (field)	7.1	SU
G200	Background	E006	08/06/2024	Radium 226 + Radium 228, total	0.491	pCi/L
G200	Background	E006	08/06/2024	Selenium, total	0.00230	mg/L
G200	Background	E006	08/06/2024	Specific Conductance @ 25C (field)	899	micromhos/cm
G200	Background	E006	08/06/2024	Sulfate, total	113	mg/L
G200	Background	E006	08/06/2024	Temperature	19.0	degrees C
G200	Background	E006	08/06/2024	Thallium, total	0.001 U	mg/L
G200	Background	E006	08/06/2024	Total Dissolved Solids	546	mg/L
G200	Background	E006	08/06/2024	Turbidity, field	5.60	NTU
R201	Background	E006	08/06/2024	Antimony, total	0.0007 J	mg/L
R201	Background	E006	08/06/2024	Arsenic, total	0.00160	mg/L
R201	Background	E006	08/06/2024	Barium, total	0.0614	mg/L
R201	Background	E006	08/06/2024	Beryllium, total	0.0002 U	mg/L
R201	Background	E006	08/06/2024	Boron, total	0.0092 U	mg/L
R201	Background	E006	08/06/2024	Cadmium, total	0.0002 U	mg/L
R201	Background	E006	08/06/2024	Calcium, total	95.3	mg/L
R201	Background	E006	08/06/2024	Chloride, total	72.0	mg/L
R201	Background	E006	08/06/2024	Chromium, total	0.0007 U	mg/L
R201	Background	E006	08/06/2024	Cobalt, total	0.0003 J	mg/L
R201	Background	E006	08/06/2024	Dissolved Oxygen	1.41	mg/L
R201	Background	E006	08/06/2024	Fluoride, total	0.34 J	mg/L
R201	Background	E006	08/06/2024	Lead, total	0.0006 U	mg/L
R201	Background	E006	08/06/2024	Lithium, total	0.0028 J	mg/L
R201	Background	E006	08/06/2024	Mercury, total	0.00006 U	mg/L
R201	Background	E006	08/06/2024	Molybdenum, total	0.0012 J	mg/L
R201	Background	E006	08/06/2024	Oxidation Reduction Potential	-105	mV
R201	Background	E006	08/06/2024	pH (field)	7.0	SU
R201	Background	E006	08/06/2024	Radium 226 + Radium 228, total	0.591	pCi/L
R201	Background	E006	08/06/2024	Selenium, total	0.0006 U	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
R201	Background	E006	08/06/2024	Specific Conductance @ 25C (field)	1,120	micromhos/cm
R201	Background	E006	08/06/2024	Sulfate, total	184	mg/L
R201	Background	E006	08/06/2024	Temperature	18.5	degrees C
R201	Background	E006	08/06/2024	Thallium, total	0.001 U	mg/L
R201	Background	E006	08/06/2024	Total Dissolved Solids	674	mg/L
R201	Background	E006	08/06/2024	Turbidity, field	7.10	NTU
G206	Compliance	E006	07/30/2024	Antimony, total	0.0004 U	mg/L
G206	Compliance	E006	07/30/2024	Arsenic, total	0.00220	mg/L
G206	Compliance	E006	07/30/2024	Barium, total	0.0841	mg/L
G206	Compliance	E006	07/30/2024	Beryllium, total	0.0002 U	mg/L
G206	Compliance	E006	07/30/2024	Boron, total	0.0092 U	mg/L
G206	Compliance	E006	07/30/2024	Cadmium, total	0.0002 U	mg/L
G206	Compliance	E006	07/30/2024	Calcium, total	99.7	mg/L
G206	Compliance	E006	07/30/2024	Chloride, total	25.0	mg/L
G206	Compliance	E006	07/30/2024	Chromium, total	0.00170	mg/L
G206	Compliance	E006	07/30/2024	Cobalt, total	0.0001 U	mg/L
G206	Compliance	E006	07/30/2024	Dissolved Oxygen	0.560	mg/L
G206	Compliance	E006	07/30/2024	Fluoride, total	0.4 J	mg/L
G206	Compliance	E006	07/30/2024	Lead, total	0.0006 U	mg/L
G206	Compliance	E006	07/30/2024	Lithium, total	0.0027 J	mg/L
G206	Compliance	E006	07/30/2024	Mercury, total	0.00006 U	mg/L
G206	Compliance	E006	07/30/2024	Molybdenum, total	0.0012 J	mg/L
G206	Compliance	E006	07/30/2024	Oxidation Reduction Potential	-262	mV
G206	Compliance	E006	07/30/2024	pH (field)	7.3	SU
G206	Compliance	E006	07/30/2024	Radium 226 + Radium 228, total	0.626	pCi/L
G206	Compliance	E006	07/30/2024	Selenium, total	0.0006 U	mg/L
G206	Compliance	E006	07/30/2024	Specific Conductance @ 25C (field)	899	micromhos/cm
G206	Compliance	E006	07/30/2024	Sulfate, total	165	mg/L
G206	Compliance	E006	07/30/2024	Temperature	19.1	degrees C
G206	Compliance	E006	07/30/2024	Thallium, total	0.001 U	mg/L
G206	Compliance	E006	07/30/2024	Total Dissolved Solids	572	mg/L
G206	Compliance	E006	07/30/2024	Turbidity, field	49.0	NTU
G206D	Compliance	E006	07/30/2024	Antimony, total	0.0004 U	mg/L
G206D	Compliance	E006	07/30/2024	Arsenic, total	0.0113	mg/L
G206D	Compliance	E006	07/30/2024	Barium, total	0.205	mg/L
G206D	Compliance	E006	07/30/2024	Beryllium, total	0.0002 U	mg/L
G206D	Compliance	E006	07/30/2024	Boron, total	0.111	mg/L
G206D	Compliance	E006	07/30/2024	Cadmium, total	0.0002 U	mg/L
G206D	Compliance	E006	07/30/2024	Calcium, total	89.7	mg/L
G206D	Compliance	E006	07/30/2024	Chloride, total	20.0	mg/L
G206D	Compliance	E006	07/30/2024	Chromium, total	0.00190	mg/L
G206D	Compliance	E006	07/30/2024	Cobalt, total	0.0002 J	mg/L
G206D	Compliance	E006	07/30/2024	Dissolved Oxygen	0.800	mg/L
G206D	Compliance	E006	07/30/2024	Fluoride, total	0.930	mg/L
G206D	Compliance	E006	07/30/2024	Lead, total	0.0006 U	mg/L
G206D	Compliance	E006	07/30/2024	Lithium, total	0.0026 J	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G206D	Compliance	E006	07/30/2024	Mercury, total	0.00006 U	mg/L
G206D	Compliance	E006	07/30/2024	Molybdenum, total	0.00420	mg/L
G206D	Compliance	E006	07/30/2024	Oxidation Reduction Potential	-74.0	mV
G206D	Compliance	E006	07/30/2024	pH (field)	7.2	SU
G206D	Compliance	E006	07/30/2024	Radium 226 + Radium 228, total	1	pCi/L
G206D	Compliance	E006	07/30/2024	Selenium, total	0.0006 U	mg/L
G206D	Compliance	E006	07/30/2024	Specific Conductance @ 25C (field)	962	micromhos/cm
G206D	Compliance	E006	07/30/2024	Sulfate, total	119	mg/L
G206D	Compliance	E006	07/30/2024	Temperature	19.4	degrees C
G206D	Compliance	E006	07/30/2024	Thallium, total	0.001 U	mg/L
G206D	Compliance	E006	07/30/2024	Total Dissolved Solids	606	mg/L
G206D	Compliance	E006	07/30/2024	Turbidity, field	13.0	NTU
G209	Compliance	E006	07/30/2024	Antimony, total	0.0005 J	mg/L
G209	Compliance	E006	07/30/2024	Arsenic, total	0.00120	mg/L
G209	Compliance	E006	07/30/2024	Barium, total	0.0763	mg/L
G209	Compliance	E006	07/30/2024	Beryllium, total	0.0002 U	mg/L
G209	Compliance	E006	07/30/2024	Boron, total	0.012 J	mg/L
G209	Compliance	E006	07/30/2024	Cadmium, total	0.0002 U	mg/L
G209	Compliance	E006	07/30/2024	Calcium, total	156	mg/L
G209	Compliance	E006	07/30/2024	Chloride, total	55.0	mg/L
G209	Compliance	E006	07/30/2024	Chromium, total	0.0011 J	mg/L
G209	Compliance	E006	07/30/2024	Cobalt, total	0.0008 J	mg/L
G209	Compliance	E006	07/30/2024	Dissolved Oxygen	0.680	mg/L
G209	Compliance	E006	07/30/2024	Fluoride, total	0.42 J	mg/L
G209	Compliance	E006	07/30/2024	Lead, total	0.0006 U	mg/L
G209	Compliance	E006	07/30/2024	Lithium, total	0.00430	mg/L
G209	Compliance	E006	07/30/2024	Mercury, total	0.00006 U	mg/L
G209	Compliance	E006	07/30/2024	Molybdenum, total	0.00270	mg/L
G209	Compliance	E006	07/30/2024	Oxidation Reduction Potential	-42.0	mV
G209	Compliance	E006	07/30/2024	pH (field)	6.9	SU
G209	Compliance	E006	07/30/2024	Radium 226 + Radium 228, total	0.528	pCi/L
G209	Compliance	E006	07/30/2024	Selenium, total	0.0006 U	mg/L
G209	Compliance	E006	07/30/2024	Specific Conductance @ 25C (field)	1,220	micromhos/cm
G209	Compliance	E006	07/30/2024	Sulfate, total	249	mg/L
G209	Compliance	E006	07/30/2024	Temperature	19.5	degrees C
G209	Compliance	E006	07/30/2024	Thallium, total	0.001 U	mg/L
G209	Compliance	E006	07/30/2024	Total Dissolved Solids	846	mg/L
G209	Compliance	E006	07/30/2024	Turbidity, field	68.0	NTU
G212	Compliance	E006	08/01/2024	Antimony, total	0.0004 U	mg/L
G212	Compliance	E006	08/01/2024	Arsenic, total	0.0004 U	mg/L
G212	Compliance	E006	08/01/2024	Barium, total	0.0521	mg/L
G212	Compliance	E006	08/01/2024	Beryllium, total	0.0002 U	mg/L
G212	Compliance	E006	08/01/2024	Boron, total	0.0092 U	mg/L
G212	Compliance	E006	08/01/2024	Cadmium, total	0.0002 U	mg/L
G212	Compliance	E006	08/01/2024	Calcium, total	56.0	mg/L
G212	Compliance	E006	08/01/2024	Chloride, total	49.0	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G212	Compliance	E006	08/01/2024	Chromium, total	0.0007 U	mg/L
G212	Compliance	E006	08/01/2024	Cobalt, total	0.0001 U	mg/L
G212	Compliance	E006	08/01/2024	Dissolved Oxygen	0.750	mg/L
G212	Compliance	E006	08/01/2024	Fluoride, total	0.28 J	mg/L
G212	Compliance	E006	08/01/2024	Lead, total	0.0006 U	mg/L
G212	Compliance	E006	08/01/2024	Lithium, total	0.0017 J	mg/L
G212	Compliance	E006	08/01/2024	Mercury, total	0.00006 U	mg/L
G212	Compliance	E006	08/01/2024	Molybdenum, total	0.0006 U	mg/L
G212	Compliance	E006	08/01/2024	Oxidation Reduction Potential	54.0	mV
G212	Compliance	E006	08/01/2024	pH (field)	7.2	SU
G212	Compliance	E006	08/01/2024	Radium 226 + Radium 228, total	0.719	pCi/L
G212	Compliance	E006	08/01/2024	Selenium, total	0.0006 U	mg/L
G212	Compliance	E006	08/01/2024	Specific Conductance @ 25C (field)	692	micromhos/cm
G212	Compliance	E006	08/01/2024	Sulfate, total	65.0	mg/L
G212	Compliance	E006	08/01/2024	Temperature	18.7	degrees C
G212	Compliance	E006	08/01/2024	Thallium, total	0.001 U	mg/L
G212	Compliance	E006	08/01/2024	Total Dissolved Solids	434	mg/L
G212	Compliance	E006	08/01/2024	Turbidity, field	6.50	NTU
G213	Compliance	E006	08/01/2024	Antimony, total	0.0007 J	mg/L
G213	Compliance	E006	08/01/2024	Arsenic, total	0.0004 U	mg/L
G213	Compliance	E006	08/01/2024	Barium, total	0.0495	mg/L
G213	Compliance	E006	08/01/2024	Beryllium, total	0.0002 U	mg/L
G213	Compliance	E006	08/01/2024	Boron, total	0.0092 U	mg/L
G213	Compliance	E006	08/01/2024	Cadmium, total	0.0002 U	mg/L
G213	Compliance	E006	08/01/2024	Calcium, total	73.8	mg/L
G213	Compliance	E006	08/01/2024	Chloride, total	56.0	mg/L
G213	Compliance	E006	08/01/2024	Chromium, total	0.0007 U	mg/L
G213	Compliance	E006	08/01/2024	Cobalt, total	0.0003 J	mg/L
G213	Compliance	E006	08/01/2024	Dissolved Oxygen	0.700	mg/L
G213	Compliance	E006	08/01/2024	Fluoride, total	0.29 J	mg/L
G213	Compliance	E006	08/01/2024	Lead, total	0.0006 U	mg/L
G213	Compliance	E006	08/01/2024	Lithium, total	0.00340	mg/L
G213	Compliance	E006	08/01/2024	Mercury, total	0.00006 U	mg/L
G213	Compliance	E006	08/01/2024	Molybdenum, total	0.0006 U	mg/L
G213	Compliance	E006	08/01/2024	Oxidation Reduction Potential	12.0	mV
G213	Compliance	E006	08/01/2024	pH (field)	7.1	SU
G213	Compliance	E006	08/01/2024	Radium 226 + Radium 228, total	0.00662	pCi/L
G213	Compliance	E006	08/01/2024	Selenium, total	0.0006 U	mg/L
G213	Compliance	E006	08/01/2024	Specific Conductance @ 25C (field)	672	micromhos/cm
G213	Compliance	E006	08/01/2024	Sulfate, total	72.0	mg/L
G213	Compliance	E006	08/01/2024	Temperature	18.3	degrees C
G213	Compliance	E006	08/01/2024	Thallium, total	0.001 U	mg/L
G213	Compliance	E006	08/01/2024	Total Dissolved Solids	432	mg/L
G213	Compliance	E006	08/01/2024	Turbidity, field	5.50	NTU
G215	Compliance	E006	08/06/2024	Antimony, total	0.0004 U	mg/L
G215	Compliance	E006	08/06/2024	Arsenic, total	0.00190	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G215	Compliance	E006	08/06/2024	Barium, total	0.0296	mg/L
G215	Compliance	E006	08/06/2024	Beryllium, total	0.0002 U	mg/L
G215	Compliance	E006	08/06/2024	Boron, total	0.576	mg/L
G215	Compliance	E006	08/06/2024	Cadmium, total	0.0002 U	mg/L
G215	Compliance	E006	08/06/2024	Calcium, total	162	mg/L
G215	Compliance	E006	08/06/2024	Chloride, total	139	mg/L
G215	Compliance	E006	08/06/2024	Chromium, total	0.0007 U	mg/L
G215	Compliance	E006	08/06/2024	Cobalt, total	0.0004 J	mg/L
G215	Compliance	E006	08/06/2024	Dissolved Oxygen	0.660	mg/L
G215	Compliance	E006	08/06/2024	Fluoride, total	0.29 J	mg/L
G215	Compliance	E006	08/06/2024	Lead, total	0.0006 U	mg/L
G215	Compliance	E006	08/06/2024	Lithium, total	0.00670	mg/L
G215	Compliance	E006	08/06/2024	Mercury, total	0.00006 U	mg/L
G215	Compliance	E006	08/06/2024	Molybdenum, total	0.0006 U	mg/L
G215	Compliance	E006	08/06/2024	Oxidation Reduction Potential	-32.0	mV
G215	Compliance	E006	08/06/2024	pH (field)	6.8	SU
G215	Compliance	E006	08/06/2024	Radium 226 + Radium 228, total	0.418	pCi/L
G215	Compliance	E006	08/06/2024	Selenium, total	0.0006 U	mg/L
G215	Compliance	E006	08/06/2024	Specific Conductance @ 25C (field)	1,370	micromhos/cm
G215	Compliance	E006	08/06/2024	Sulfate, total	489	mg/L
G215	Compliance	E006	08/06/2024	Temperature	18.6	degrees C
G215	Compliance	E006	08/06/2024	Thallium, total	0.001 U	mg/L
G215	Compliance	E006	08/06/2024	Total Dissolved Solids	1,270	mg/L
G215	Compliance	E006	08/06/2024	Turbidity, field	150	NTU
G217	Compliance	E006	08/06/2024	Antimony, total	0.0004 U	mg/L
G217	Compliance	E006	08/06/2024	Arsenic, total	0.0004 U	mg/L
G217	Compliance	E006	08/06/2024	Barium, total	0.0687	mg/L
G217	Compliance	E006	08/06/2024	Beryllium, total	0.0002 U	mg/L
G217	Compliance	E006	08/06/2024	Boron, total	0.0364	mg/L
G217	Compliance	E006	08/06/2024	Cadmium, total	0.0002 U	mg/L
G217	Compliance	E006	08/06/2024	Calcium, total	203	mg/L
G217	Compliance	E006	08/06/2024	Chloride, total	163	mg/L
G217	Compliance	E006	08/06/2024	Chromium, total	0.0007 U	mg/L
G217	Compliance	E006	08/06/2024	Cobalt, total	0.0003 J	mg/L
G217	Compliance	E006	08/06/2024	Dissolved Oxygen	0.280	mg/L
G217	Compliance	E006	08/06/2024	Fluoride, total	0.32 J	mg/L
G217	Compliance	E006	08/06/2024	Lead, total	0.0006 U	mg/L
G217	Compliance	E006	08/06/2024	Lithium, total	0.00380	mg/L
G217	Compliance	E006	08/06/2024	Mercury, total	0.00006 U	mg/L
G217	Compliance	E006	08/06/2024	Molybdenum, total	0.0006 U	mg/L
G217	Compliance	E006	08/06/2024	Oxidation Reduction Potential	-93.0	mV
G217	Compliance	E006	08/06/2024	pH (field)	6.7	SU
G217	Compliance	E006	08/06/2024	Radium 226 + Radium 228, total	0.184	pCi/L
G217	Compliance	E006	08/06/2024	Selenium, total	0.0006 U	mg/L
G217	Compliance	E006	08/06/2024	Specific Conductance @ 25C (field)	1,330	micromhos/cm
G217	Compliance	E006	08/06/2024	Sulfate, total	480	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G217	Compliance	E006	08/06/2024	Temperature	17.1	degrees C
G217	Compliance	E006	08/06/2024	Thallium, total	0.001 U	mg/L
G217	Compliance	E006	08/06/2024	Total Dissolved Solids	1,390	mg/L
G217	Compliance	E006	08/06/2024	Turbidity, field	160	NTU
G218	Compliance	E006	07/31/2024	Antimony, total	0.0004 U	mg/L
G218	Compliance	E006	07/31/2024	Arsenic, total	0.00380	mg/L
G218	Compliance	E006	07/31/2024	Barium, total	0.0928	mg/L
G218	Compliance	E006	07/31/2024	Beryllium, total	0.0002 U	mg/L
G218	Compliance	E006	07/31/2024	Boron, total	0.0339	mg/L
G218	Compliance	E006	07/31/2024	Cadmium, total	0.0002 U	mg/L
G218	Compliance	E006	07/31/2024	Calcium, total	228	mg/L
G218	Compliance	E006	07/31/2024	Chloride, total	145	mg/L
G218	Compliance	E006	07/31/2024	Chromium, total	0.00180	mg/L
G218	Compliance	E006	07/31/2024	Cobalt, total	0.0009 J	mg/L
G218	Compliance	E006	07/31/2024	Dissolved Oxygen	1.29	mg/L
G218	Compliance	E006	07/31/2024	Fluoride, total	0.29 J	mg/L
G218	Compliance	E006	07/31/2024	Lead, total	0.0007 J	mg/L
G218	Compliance	E006	07/31/2024	Lithium, total	0.00460	mg/L
G218	Compliance	E006	07/31/2024	Mercury, total	0.00006 U	mg/L
G218	Compliance	E006	07/31/2024	Molybdenum, total	0.001 J	mg/L
G218	Compliance	E006	07/31/2024	Oxidation Reduction Potential	-101	mV
G218	Compliance	E006	07/31/2024	pH (field)	6.9	SU
G218	Compliance	E006	07/31/2024	Radium 226 + Radium 228, total	1.01	pCi/L
G218	Compliance	E006	07/31/2024	Selenium, total	0.0006 U	mg/L
G218	Compliance	E006	07/31/2024	Specific Conductance @ 25C (field)	1,700	micromhos/cm
G218	Compliance	E006	07/31/2024	Sulfate, total	422	mg/L
G218	Compliance	E006	07/31/2024	Temperature	21.0	degrees C
G218	Compliance	E006	07/31/2024	Thallium, total	0.001 U	mg/L
G218	Compliance	E006	07/31/2024	Total Dissolved Solids	1,190	mg/L
G218	Compliance	E006	07/31/2024	Turbidity, field	140	NTU

Notes:
C = Celsius
cm = centimeter
mg/L = milligrams per liter
Missing Code (if applicable):
NR¹ = Select parameters were not analyzed.
NS¹ = This well has been, or will be, abandoned; therefore, a sample was not collected.
NS² = Well either needs or was undergoing maintenance, therefore, a sample was not collected.
NS³ = A sample was not collected because the location was inaccessible.
NS⁴ = The location could not be found, therefore a sample was not collected.
NS⁵ = A sample was not collected because of damage to the well.
NS⁶ = A sample was not collected because of pump issues.
NS⁷ = A sample was not collected because the well was either dry or was purged dry and did not recover.
PM¹ = 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
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.

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G200	Background	E007	10/29/2024	Antimony, total	0.00550 J+	mg/L
G200	Background	E007	10/29/2024	Arsenic, total	0.0007 J	mg/L
G200	Background	E007	10/29/2024	Barium, total	0.0524 J	mg/L
G200	Background	E007	10/29/2024	Beryllium, total	0.0002 U	mg/L
G200	Background	E007	10/29/2024	Boron, total	0.0092 U	mg/L
G200	Background	E007	10/29/2024	Cadmium, total	0.0002 U	mg/L
G200	Background	E007	10/29/2024	Calcium, total	77.0	mg/L
G200	Background	E007	10/29/2024	Chloride, total	48.3 J	mg/L
G200	Background	E007	10/29/2024	Chromium, total	0.0256 J	mg/L
G200	Background	E007	10/29/2024	Cobalt, total	0.0003 J	mg/L
G200	Background	E007	10/29/2024	Dissolved Oxygen	1.87	mg/L
G200	Background	E007	10/29/2024	Fluoride, total	0.24 J	mg/L
G200	Background	E007	10/29/2024	Lead, total	0.0006 U	mg/L
G200	Background	E007	10/29/2024	Lithium, total	0.00660	mg/L
G200	Background	E007	10/29/2024	Mercury, total	0.00006 U	mg/L
G200	Background	E007	10/29/2024	Molybdenum, total	0.0014 J	mg/L
G200	Background	E007	10/29/2024	Oxidation Reduction Potential	-14.0	mV
G200	Background	E007	10/29/2024	pH (field)	6.9	SU
G200	Background	E007	10/29/2024	Radium 226 + Radium 228, total	0.594	pCi/L
G200	Background	E007	10/29/2024	Selenium, total	0.0006 U	mg/L
G200	Background	E007	10/29/2024	Specific Conductance @ 25C (field)	816	micromhos/cm
G200	Background	E007	10/29/2024	Sulfate, total	103	mg/L
G200	Background	E007	10/29/2024	Temperature	21.4	degrees C
G200	Background	E007	10/29/2024	Thallium, total	0.001 U	mg/L
G200	Background	E007	10/29/2024	Total Dissolved Solids	558	mg/L
G200	Background	E007	10/29/2024	Turbidity, field	5.00	NTU
R201	Background	E007	10/30/2024	Antimony, total	0.0004 U	mg/L
R201	Background	E007	10/30/2024	Arsenic, total	0.00290 J	mg/L
R201	Background	E007	10/30/2024	Barium, total	0.0986	mg/L
R201	Background	E007	10/30/2024	Beryllium, total	0.0002 U	mg/L
R201	Background	E007	10/30/2024	Boron, total	0.0092 U	mg/L
R201	Background	E007	10/30/2024	Cadmium, total	0.0002 U	mg/L
R201	Background	E007	10/30/2024	Calcium, total	108	mg/L
R201	Background	E007	10/30/2024	Chloride, total	65.6	mg/L
R201	Background	E007	10/30/2024	Chromium, total	0.00310 J	mg/L
R201	Background	E007	10/30/2024	Cobalt, total	0.00120	mg/L
R201	Background	E007	10/30/2024	Dissolved Oxygen	0.460	mg/L
R201	Background	E007	10/30/2024	Fluoride, total	0.23 J	mg/L
R201	Background	E007	10/30/2024	Lead, total	0.00140	mg/L
R201	Background	E007	10/30/2024	Lithium, total	0.00380	mg/L
R201	Background	E007	10/30/2024	Mercury, total	0.00006 U	mg/L
R201	Background	E007	10/30/2024	Molybdenum, total	0.0014 J	mg/L
R201	Background	E007	10/30/2024	Oxidation Reduction Potential	-100	mV
R201	Background	E007	10/30/2024	pH (field)	6.8	SU
R201	Background	E007	10/30/2024	Radium 226 + Radium 228, total	0.938	pCi/L
R201	Background	E007	10/30/2024	Selenium, total	0.0006 U	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024
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COFFEEN POWER PLANT
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
R201	Background	E007	10/30/2024	Specific Conductance @ 25C (field)	1,050	micromhos/cm
R201	Background	E007	10/30/2024	Sulfate, total	165	mg/L
R201	Background	E007	10/30/2024	Temperature	17.1	degrees C
R201	Background	E007	10/30/2024	Thallium, total	0.001 U	mg/L
R201	Background	E007	10/30/2024	Total Dissolved Solids	695	mg/L
R201	Background	E007	10/30/2024	Turbidity, field	21.0	NTU
G206	Compliance	E007	10/31/2024	Antimony, total	0.0004 U	mg/L
G206	Compliance	E007	10/31/2024	Arsenic, total	0.00190	mg/L
G206	Compliance	E007	10/31/2024	Barium, total	0.0727	mg/L
G206	Compliance	E007	10/31/2024	Beryllium, total	0.0002 U	mg/L
G206	Compliance	E007	10/31/2024	Boron, total	0.0092 U	mg/L
G206	Compliance	E007	10/31/2024	Cadmium, total	0.0002 U	mg/L
G206	Compliance	E007	10/31/2024	Calcium, total	94.7	mg/L
G206	Compliance	E007	10/31/2024	Chloride, total	23.2	mg/L
G206	Compliance	E007	10/31/2024	Chromium, total	0.001 J	mg/L
G206	Compliance	E007	10/31/2024	Cobalt, total	0.0003 J	mg/L
G206	Compliance	E007	10/31/2024	Dissolved Oxygen	0.940	mg/L
G206	Compliance	E007	10/31/2024	Fluoride, total	0.22 J	mg/L
G206	Compliance	E007	10/31/2024	Lead, total	0.0006 U	mg/L
G206	Compliance	E007	10/31/2024	Lithium, total	0.0027 J	mg/L
G206	Compliance	E007	10/31/2024	Mercury, total	0.00006 U	mg/L
G206	Compliance	E007	10/31/2024	Molybdenum, total	0.0009 J	mg/L
G206	Compliance	E007	10/31/2024	Oxidation Reduction Potential	-209	mV
G206	Compliance	E007	10/31/2024	pH (field)	7.1	SU
G206	Compliance	E007	10/31/2024	Radium 226 + Radium 228, total	0.121	pCi/L
G206	Compliance	E007	10/31/2024	Selenium, total	0.0006 U	mg/L
G206	Compliance	E007	10/31/2024	Specific Conductance @ 25C (field)	833	micromhos/cm
G206	Compliance	E007	10/31/2024	Sulfate, total	156	mg/L
G206	Compliance	E007	10/31/2024	Temperature	17.0	degrees C
G206	Compliance	E007	10/31/2024	Thallium, total	0.001 U	mg/L
G206	Compliance	E007	10/31/2024	Total Dissolved Solids	552	mg/L
G206	Compliance	E007	10/31/2024	Turbidity, field	15.0	NTU
G206D	Compliance	E007	10/31/2024	Antimony, total	0.0004 U	mg/L
G206D	Compliance	E007	10/31/2024	Arsenic, total	0.0117	mg/L
G206D	Compliance	E007	10/31/2024	Barium, total	0.224	mg/L
G206D	Compliance	E007	10/31/2024	Beryllium, total	0.0002 U	mg/L
G206D	Compliance	E007	10/31/2024	Boron, total	0.123	mg/L
G206D	Compliance	E007	10/31/2024	Cadmium, total	0.0002 U	mg/L
G206D	Compliance	E007	10/31/2024	Calcium, total	80.8	mg/L
G206D	Compliance	E007	10/31/2024	Chloride, total	16.8	mg/L
G206D	Compliance	E007	10/31/2024	Chromium, total	0.0007 U	mg/L
G206D	Compliance	E007	10/31/2024	Cobalt, total	0.0001 U	mg/L
G206D	Compliance	E007	10/31/2024	Dissolved Oxygen	1.06	mg/L
G206D	Compliance	E007	10/31/2024	Fluoride, total	0.780	mg/L
G206D	Compliance	E007	10/31/2024	Lead, total	0.0006 U	mg/L
G206D	Compliance	E007	10/31/2024	Lithium, total	0.0019 J	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024
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COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G206D	Compliance	E007	10/31/2024	Mercury, total	0.00006 U	mg/L
G206D	Compliance	E007	10/31/2024	Molybdenum, total	0.00250 J+	mg/L
G206D	Compliance	E007	10/31/2024	Oxidation Reduction Potential	-174	mV
G206D	Compliance	E007	10/31/2024	pH (field)	7.3	SU
G206D	Compliance	E007	10/31/2024	Radium 226 + Radium 228, total	0.132	pCi/L
G206D	Compliance	E007	10/31/2024	Selenium, total	0.0006 U	mg/L
G206D	Compliance	E007	10/31/2024	Specific Conductance @ 25C (field)	910	micromhos/cm
G206D	Compliance	E007	10/31/2024	Sulfate, total	82.1	mg/L
G206D	Compliance	E007	10/31/2024	Temperature	15.4	degrees C
G206D	Compliance	E007	10/31/2024	Thallium, total	0.001 U	mg/L
G206D	Compliance	E007	10/31/2024	Total Dissolved Solids	602	mg/L
G206D	Compliance	E007	10/31/2024	Turbidity, field	49.0	NTU
G209	Compliance	E007	10/31/2024	Antimony, total	0.0004 U	mg/L
G209	Compliance	E007	10/31/2024	Arsenic, total	0.00140	mg/L
G209	Compliance	E007	10/31/2024	Barium, total	0.0656	mg/L
G209	Compliance	E007	10/31/2024	Beryllium, total	0.0002 U	mg/L
G209	Compliance	E007	10/31/2024	Boron, total	0.011 J	mg/L
G209	Compliance	E007	10/31/2024	Cadmium, total	0.0002 U	mg/L
G209	Compliance	E007	10/31/2024	Calcium, total	146	mg/L
G209	Compliance	E007	10/31/2024	Chloride, total	53.1	mg/L
G209	Compliance	E007	10/31/2024	Chromium, total	0.0007 J	mg/L
G209	Compliance	E007	10/31/2024	Cobalt, total	0.0004 J	mg/L
G209	Compliance	E007	10/31/2024	Dissolved Oxygen	1.04	mg/L
G209	Compliance	E007	10/31/2024	Fluoride, total	0.28 J	mg/L
G209	Compliance	E007	10/31/2024	Lead, total	0.0006 U	mg/L
G209	Compliance	E007	10/31/2024	Lithium, total	0.00540	mg/L
G209	Compliance	E007	10/31/2024	Mercury, total	0.00006 U	mg/L
G209	Compliance	E007	10/31/2024	Molybdenum, total	0.00270 J+	mg/L
G209	Compliance	E007	10/31/2024	Oxidation Reduction Potential	-86.0	mV
G209	Compliance	E007	10/31/2024	pH (field)	6.8	SU
G209	Compliance	E007	10/31/2024	Radium 226 + Radium 228, total	0.938	pCi/L
G209	Compliance	E007	10/31/2024	Selenium, total	0.0006 U	mg/L
G209	Compliance	E007	10/31/2024	Specific Conductance @ 25C (field)	1,190	micromhos/cm
G209	Compliance	E007	10/31/2024	Sulfate, total	241	mg/L
G209	Compliance	E007	10/31/2024	Temperature	16.8	degrees C
G209	Compliance	E007	10/31/2024	Thallium, total	0.001 U	mg/L
G209	Compliance	E007	10/31/2024	Total Dissolved Solids	798	mg/L
G209	Compliance	E007	10/31/2024	Turbidity, field	5.80	NTU
G212	Compliance	E007	10/31/2024	Antimony, total	0.0004 U	mg/L
G212	Compliance	E007	10/31/2024	Arsenic, total	0.0004 U	mg/L
G212	Compliance	E007	10/31/2024	Barium, total	0.0570	mg/L
G212	Compliance	E007	10/31/2024	Beryllium, total	0.0002 U	mg/L
G212	Compliance	E007	10/31/2024	Boron, total	0.0092 U	mg/L
G212	Compliance	E007	10/31/2024	Cadmium, total	0.0002 U	mg/L
G212	Compliance	E007	10/31/2024	Calcium, total	51.1	mg/L
G212	Compliance	E007	10/31/2024	Chloride, total	47.2	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G212	Compliance	E007	10/31/2024	Chromium, total	0.00680	mg/L
G212	Compliance	E007	10/31/2024	Cobalt, total	0.0002 J	mg/L
G212	Compliance	E007	10/31/2024	Dissolved Oxygen	0.590	mg/L
G212	Compliance	E007	10/31/2024	Fluoride, total	0.2 U	mg/L
G212	Compliance	E007	10/31/2024	Lead, total	0.0006 U	mg/L
G212	Compliance	E007	10/31/2024	Lithium, total	0.0015 J	mg/L
G212	Compliance	E007	10/31/2024	Mercury, total	0.00006 U	mg/L
G212	Compliance	E007	10/31/2024	Molybdenum, total	0.0008 J	mg/L
G212	Compliance	E007	10/31/2024	Oxidation Reduction Potential	13.0	mV
G212	Compliance	E007	10/31/2024	pH (field)	6.7	SU
G212	Compliance	E007	10/31/2024	Radium 226 + Radium 228, total	0.147	pCi/L
G212	Compliance	E007	10/31/2024	Selenium, total	0.0006 U	mg/L
G212	Compliance	E007	10/31/2024	Specific Conductance @ 25C (field)	647	micromhos/cm
G212	Compliance	E007	10/31/2024	Sulfate, total	57.2	mg/L
G212	Compliance	E007	10/31/2024	Temperature	16.7	degrees C
G212	Compliance	E007	10/31/2024	Thallium, total	0.001 U	mg/L
G212	Compliance	E007	10/31/2024	Total Dissolved Solids	464	mg/L
G212	Compliance	E007	10/31/2024	Turbidity, field	100	NTU
G213	Compliance	E007	10/31/2024	Antimony, total	0.0004 U	mg/L
G213	Compliance	E007	10/31/2024	Arsenic, total	0.0004 U	mg/L
G213	Compliance	E007	10/31/2024	Barium, total	0.0541	mg/L
G213	Compliance	E007	10/31/2024	Beryllium, total	0.0002 U	mg/L
G213	Compliance	E007	10/31/2024	Boron, total	0.0092 U	mg/L
G213	Compliance	E007	10/31/2024	Cadmium, total	0.0002 U	mg/L
G213	Compliance	E007	10/31/2024	Calcium, total	67.0	mg/L
G213	Compliance	E007	10/31/2024	Chloride, total	49.3	mg/L
G213	Compliance	E007	10/31/2024	Chromium, total	0.0009 J	mg/L
G213	Compliance	E007	10/31/2024	Cobalt, total	0.0001 J	mg/L
G213	Compliance	E007	10/31/2024	Dissolved Oxygen	0.540	mg/L
G213	Compliance	E007	10/31/2024	Fluoride, total	0.2 U	mg/L
G213	Compliance	E007	10/31/2024	Lead, total	0.0006 U	mg/L
G213	Compliance	E007	10/31/2024	Lithium, total	0.00330	mg/L
G213	Compliance	E007	10/31/2024	Mercury, total	0.00006 U	mg/L
G213	Compliance	E007	10/31/2024	Molybdenum, total	0.0006 U	mg/L
G213	Compliance	E007	10/31/2024	Oxidation Reduction Potential	24.0	mV
G213	Compliance	E007	10/31/2024	pH (field)	6.7	SU
G213	Compliance	E007	10/31/2024	Radium 226 + Radium 228, total	0.278	pCi/L
G213	Compliance	E007	10/31/2024	Selenium, total	0.0006 U	mg/L
G213	Compliance	E007	10/31/2024	Specific Conductance @ 25C (field)	627	micromhos/cm
G213	Compliance	E007	10/31/2024	Sulfate, total	61.3	mg/L
G213	Compliance	E007	10/31/2024	Temperature	16.6	degrees C
G213	Compliance	E007	10/31/2024	Thallium, total	0.001 U	mg/L
G213	Compliance	E007	10/31/2024	Total Dissolved Solids	470	mg/L
G213	Compliance	E007	10/31/2024	Turbidity, field	160	NTU
G215	Compliance	E007	10/31/2024	Antimony, total	0.0004 U	mg/L
G215	Compliance	E007	10/31/2024	Arsenic, total	0.00310	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G215	Compliance	E007	10/31/2024	Barium, total	0.0386	mg/L
G215	Compliance	E007	10/31/2024	Beryllium, total	0.0002 U	mg/L
G215	Compliance	E007	10/31/2024	Boron, total	0.699	mg/L
G215	Compliance	E007	10/31/2024	Cadmium, total	0.0002 U	mg/L
G215	Compliance	E007	10/31/2024	Calcium, total	169	mg/L
G215	Compliance	E007	10/31/2024	Chloride, total	139	mg/L
G215	Compliance	E007	10/31/2024	Chromium, total	0.0007 U	mg/L
G215	Compliance	E007	10/31/2024	Cobalt, total	0.0007 J	mg/L
G215	Compliance	E007	10/31/2024	Dissolved Oxygen	1.28	mg/L
G215	Compliance	E007	10/31/2024	Fluoride, total	0.2 U	mg/L
G215	Compliance	E007	10/31/2024	Lead, total	0.0006 U	mg/L
G215	Compliance	E007	10/31/2024	Lithium, total	0.00880	mg/L
G215	Compliance	E007	10/31/2024	Mercury, total	0.00006 U	mg/L
G215	Compliance	E007	10/31/2024	Molybdenum, total	0.0006 U	mg/L
G215	Compliance	E007	10/31/2024	Oxidation Reduction Potential	-36.0	mV
G215	Compliance	E007	10/31/2024	pH (field)	6.8	SU
G215	Compliance	E007	10/31/2024	Radium 226 + Radium 228, total	0.122	pCi/L
G215	Compliance	E007	10/31/2024	Selenium, total	0.0006 U	mg/L
G215	Compliance	E007	10/31/2024	Specific Conductance @ 25C (field)	1,730	micromhos/cm
G215	Compliance	E007	10/31/2024	Sulfate, total	569	mg/L
G215	Compliance	E007	10/31/2024	Temperature	16.5	degrees C
G215	Compliance	E007	10/31/2024	Thallium, total	0.001 U	mg/L
G215	Compliance	E007	10/31/2024	Total Dissolved Solids	1,330	mg/L
G215	Compliance	E007	10/31/2024	Turbidity, field	65.0	NTU
G217	Compliance	E007	10/31/2024	Antimony, total	0.0004 U	mg/L
G217	Compliance	E007	10/31/2024	Arsenic, total	0.0005 J	mg/L
G217	Compliance	E007	10/31/2024	Barium, total	0.0676	mg/L
G217	Compliance	E007	10/31/2024	Beryllium, total	0.0002 U	mg/L
G217	Compliance	E007	10/31/2024	Boron, total	0.0571	mg/L
G217	Compliance	E007	10/31/2024	Cadmium, total	0.0002 U	mg/L
G217	Compliance	E007	10/31/2024	Calcium, total	220	mg/L
G217	Compliance	E007	10/31/2024	Chloride, total	150	mg/L
G217	Compliance	E007	10/31/2024	Chromium, total	0.0007 U	mg/L
G217	Compliance	E007	10/31/2024	Cobalt, total	0.0003 J	mg/L
G217	Compliance	E007	10/31/2024	Dissolved Oxygen	1.12	mg/L
G217	Compliance	E007	10/31/2024	Fluoride, total	0.2 U	mg/L
G217	Compliance	E007	10/31/2024	Lead, total	0.0006 U	mg/L
G217	Compliance	E007	10/31/2024	Lithium, total	0.00390	mg/L
G217	Compliance	E007	10/31/2024	Mercury, total	0.00006 U	mg/L
G217	Compliance	E007	10/31/2024	Molybdenum, total	0.0006 U	mg/L
G217	Compliance	E007	10/31/2024	Oxidation Reduction Potential	-90.0	mV
G217	Compliance	E007	10/31/2024	pH (field)	6.7	SU
G217	Compliance	E007	10/31/2024	Radium 226 + Radium 228, total	0.565	pCi/L
G217	Compliance	E007	10/31/2024	Selenium, total	0.0006 U	mg/L
G217	Compliance	E007	10/31/2024	Specific Conductance @ 25C (field)	1,690	micromhos/cm
G217	Compliance	E007	10/31/2024	Sulfate, total	554	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G217	Compliance	E007	10/31/2024	Temperature	16.3	degrees C
G217	Compliance	E007	10/31/2024	Thallium, total	0.001 U	mg/L
G217	Compliance	E007	10/31/2024	Total Dissolved Solids	1,390	mg/L
G217	Compliance	E007	10/31/2024	Turbidity, field	73.0	NTU
G218	Compliance	E007	10/31/2024	Antimony, total	0.0004 U	mg/L
G218	Compliance	E007	10/31/2024	Arsenic, total	0.00280	mg/L
G218	Compliance	E007	10/31/2024	Barium, total	0.0728	mg/L
G218	Compliance	E007	10/31/2024	Beryllium, total	0.0002 U	mg/L
G218	Compliance	E007	10/31/2024	Boron, total	0.0495	mg/L
G218	Compliance	E007	10/31/2024	Cadmium, total	0.0002 U	mg/L
G218	Compliance	E007	10/31/2024	Calcium, total	210	mg/L
G218	Compliance	E007	10/31/2024	Chloride, total	143	mg/L
G218	Compliance	E007	10/31/2024	Chromium, total	0.00190	mg/L
G218	Compliance	E007	10/31/2024	Cobalt, total	0.00130	mg/L
G218	Compliance	E007	10/31/2024	Dissolved Oxygen	1.16	mg/L
G218	Compliance	E007	10/31/2024	Fluoride, total	0.2 U	mg/L
G218	Compliance	E007	10/31/2024	Lead, total	0.0006 U	mg/L
G218	Compliance	E007	10/31/2024	Lithium, total	0.00540	mg/L
G218	Compliance	E007	10/31/2024	Mercury, total	0.00006 U	mg/L
G218	Compliance	E007	10/31/2024	Molybdenum, total	0.0006 U	mg/L
G218	Compliance	E007	10/31/2024	Oxidation Reduction Potential	-149	mV
G218	Compliance	E007	10/31/2024	pH (field)	6.7	SU
G218	Compliance	E007	10/31/2024	Radium 226 + Radium 228, total	1.34	pCi/L
G218	Compliance	E007	10/31/2024	Selenium, total	0.0006 U	mg/L
G218	Compliance	E007	10/31/2024	Specific Conductance @ 25C (field)	1,700	micromhos/cm
G218	Compliance	E007	10/31/2024	Sulfate, total	534	mg/L
G218	Compliance	E007	10/31/2024	Temperature	16.2	degrees C
G218	Compliance	E007	10/31/2024	Thallium, total	0.001 U	mg/L
G218	Compliance	E007	10/31/2024	Total Dissolved Solids	1,460	mg/L
G218	Compliance	E007	10/31/2024	Turbidity, field	20.0	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):
NR¹ = Parameter not analyzed.
NS¹ = Well has been, or will be, abandoned; therefore, a sample was not collected.
NS² = Well either needs or was undergoing maintenance; therefore, a sample was not collected.
NS³ = The location was not accessible; therefore, a sample was not collected.
NS⁴ = The location could not be found; therefore, a sample was not collected.
NS⁵ = The location was damaged; therefore, a sample was not collected.
NS⁶ = Sampling pump could not yield a sample.
NS⁷ = Well was either dry or purged dry and did not recover sufficiently to yield adequate volume for a sample.
NS⁸ = A sample was not collected.
PM¹ = 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
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G206	UA	E004	Antimony, total	mg/L	11/18/15 - 02/13/24	22	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G206	UA	E004	Arsenic, total	mg/L	11/18/15 - 02/13/24	22	69	CI around median	0.001	0.0110	Background	No Exceedance
G206	UA	E004	Barium, total	mg/L	11/18/15 - 02/13/24	22	3	CI around mean	0.0477	2.0	Standard	No Exceedance
G206	UA	E004	Beryllium, total	mg/L	11/18/15 - 02/13/24	22	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G206	UA	E004	Boron, total	mg/L	11/18/15 - 02/13/24	29	79	CI around median	0.01	2	Standard	No Exceedance
G206	UA	E004	Cadmium, total	mg/L	11/18/15 - 02/13/24	22	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G206	UA	E004	Chloride, total	mg/L	11/18/15 - 02/13/24	29	0	CB around linear reg	18.8	200	Standard	No Exceedance
G206	UA	E004	Chromium, total	mg/L	11/18/15 - 02/13/24	22	85	CB around T-S line	0.00321	0.1	Standard	No Exceedance
G206	UA	E004	Cobalt, total	mg/L	11/18/15 - 02/13/24	22	97	CB around T-S line	0.00189	0.006	Standard	No Exceedance
G206	UA	E004	Fluoride, total	mg/L	11/18/15 - 02/13/24	30	5	CI around mean	0.385	4.0	Standard	No Exceedance
G206	UA	E004	Lead, total	mg/L	11/18/15 - 02/13/24	22	93	CI around median	0.001	0.0075	Standard	No Exceedance
G206	UA	E004	Lithium, total	mg/L	11/18/15 - 02/13/24	15	100	All ND - Last	0.003	0.04	Standard	No Exceedance
G206	UA	E004	Mercury, total	mg/L	11/18/15 - 02/13/24	22	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G206	UA	E004	Molybdenum, total	mg/L	11/18/15 - 02/13/24	22	67	CI around median	0.001	0.1	Standard	No Exceedance
G206	UA	E004	pH (field)	SU	11/18/15 - 02/13/24	31	0	CI around median	7.1/7.2	6.5/9.0	Standard/Standard	No Exceedance
G206	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 02/13/24	15	0	CI around mean	0.437	5	Standard	No Exceedance
G206	UA	E004	Selenium, total	mg/L	11/18/15 - 02/13/24	22	82	CI around median	0.001	0.05	Standard	No Exceedance
G206	UA	E004	Sulfate, total	mg/L	11/18/15 - 02/13/24	29	0	CB around linear reg	125	400	Standard	No Exceedance
G206	UA	E004	Thallium, total	mg/L	11/18/15 - 02/13/24	22	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G206	UA	E004	Total Dissolved Solids	mg/L	11/18/15 - 02/13/24	29	0	CB around T-S line	478	1,200	Standard	No Exceedance
G206D	DA	E004	Antimony, total	mg/L	03/30/21 - 02/16/24	10	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G206D	DA	E004	Arsenic, total	mg/L	03/30/21 - 02/16/24	10	0	CB around linear reg	0.0163	0.0110	Background	Exceedance
G206D	DA	E004	Barium, total	mg/L	03/30/21 - 02/16/24	10	0	CI around mean	0.103	2.0	Standard	No Exceedance
G206D	DA	E004	Beryllium, total	mg/L	03/30/21 - 02/16/24	10	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G206D	DA	E004	Boron, total	mg/L	03/30/21 - 02/16/24	10	0	CI around mean	0.114	2	Standard	No Exceedance
G206D	DA	E004	Cadmium, total	mg/L	03/30/21 - 02/16/24	10	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G206D	DA	E004	Chloride, total	mg/L	03/30/21 - 02/16/24	10	0	CB around linear reg	3.89	200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G206D	DA	E004	Chromium, total	mg/L	03/30/21 - 02/16/24	10	90	CB around T-S line	-0.00544	0.1	Standard	No Exceedance
G206D	DA	E004	Cobalt, total	mg/L	03/30/21 - 02/16/24	10	90	CB around T-S line	-0.000361	0.006	Standard	No Exceedance
G206D	DA	E004	Fluoride, total	mg/L	03/30/21 - 02/16/24	10	0	CI around mean	0.682	4.0	Standard	No Exceedance
G206D	DA	E004	Lead, total	mg/L	03/30/21 - 02/16/24	10	80	CI around median	0.001	0.0075	Standard	No Exceedance
G206D	DA	E004	Lithium, total	mg/L	03/30/21 - 02/16/24	10	100	All ND - Last	0.003	0.04	Standard	No Exceedance
G206D	DA	E004	Mercury, total	mg/L	03/30/21 - 02/16/24	10	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G206D	DA	E004	Molybdenum, total	mg/L	03/30/21 - 02/16/24	10	0	CB around linear reg	0.00646	0.1	Standard	No Exceedance
G206D	DA	E004	pH (field)	SU	03/30/21 - 02/16/24	10	0	CI around mean	6.9/7.4	6.5/9.0	Standard/Standard	No Exceedance
G206D	DA	E004	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 02/16/24	11	0	CI around mean	0.276	5	Standard	No Exceedance
G206D	DA	E004	Selenium, total	mg/L	03/30/21 - 02/16/24	10	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G206D	DA	E004	Sulfate, total	mg/L	03/30/21 - 02/16/24	10	0	CB around linear reg	-100	400	Standard	No Exceedance
G206D	DA	E004	Thallium, total	mg/L	03/30/21 - 02/16/24	10	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G206D	DA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/16/24	10	0	CB around linear reg	434	1,200	Standard	No Exceedance
G209	UA	E004	Antimony, total	mg/L	11/18/15 - 02/13/24	22	97	CB around T-S line	0.00279	0.006	Standard	No Exceedance
G209	UA	E004	Arsenic, total	mg/L	11/18/15 - 02/13/24	22	42	CI around geomean	0.00114	0.0110	Background	No Exceedance
G209	UA	E004	Barium, total	mg/L	11/18/15 - 02/13/24	22	0	CI around mean	0.0574	2.0	Standard	No Exceedance
G209	UA	E004	Beryllium, total	mg/L	11/18/15 - 02/13/24	22	97	Most recent sample	0.001	0.004	Standard	No Exceedance
G209	UA	E004	Boron, total	mg/L	11/18/15 - 02/13/24	29	58	CI around median	0.01	2	Standard	No Exceedance
G209	UA	E004	Cadmium, total	mg/L	11/18/15 - 02/13/24	22	98	Most recent sample	0.001	0.005	Standard	No Exceedance
G209	UA	E004	Chloride, total	mg/L	11/18/15 - 02/13/24	29	0	CI around median	59	200	Standard	No Exceedance
G209	UA	E004	Chromium, total	mg/L	11/18/15 - 02/13/24	22	71	CB around T-S line	0.00373	0.1	Standard	No Exceedance
G209	UA	E004	Cobalt, total	mg/L	11/18/15 - 02/13/24	22	88	CB around T-S line	0.00189	0.006	Standard	No Exceedance
G209	UA	E004	Fluoride, total	mg/L	11/18/15 - 02/13/24	30	2	CI around mean	0.406	4.0	Standard	No Exceedance
G209	UA	E004	Lead, total	mg/L	11/18/15 - 02/13/24	22	87	CI around median	0.001	0.0075	Standard	No Exceedance
G209	UA	E004	Lithium, total	mg/L	11/18/15 - 02/13/24	15	80	CI around median	0.0058	0.04	Standard	No Exceedance
G209	UA	E004	Mercury, total	mg/L	11/18/15 - 02/13/24	22	97	Most recent sample	0.0002	0.002	Standard	No Exceedance
G209	UA	E004	Molybdenum, total	mg/L	11/18/15 - 02/13/24	22	8	CI around mean	0.00163	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G209	UA	E004	pH (field)	SU	11/18/15 - 02/13/24	33	0	CI around mean	7.0/7.2	6.5/9.0	Standard/Standard	No Exceedance
G209	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 02/13/24	15	0	CI around mean	0.481	5	Standard	No Exceedance
G209	UA	E004	Selenium, total	mg/L	11/18/15 - 02/13/24	22	62	CI around median	0.001	0.05	Standard	No Exceedance
G209	UA	E004	Sulfate, total	mg/L	11/18/15 - 02/13/24	29	0	CI around median	240	400	Standard	No Exceedance
G209	UA	E004	Thallium, total	mg/L	11/18/15 - 02/13/24	22	94	CB around T-S line	0.001	0.002	Standard	No Exceedance
G209	UA	E004	Total Dissolved Solids	mg/L	11/18/15 - 02/13/24	29	0	CI around mean	792	1,200	Standard	No Exceedance
G212	UA	E004	Antimony, total	mg/L	11/18/15 - 02/14/24	22	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G212	UA	E004	Arsenic, total	mg/L	11/18/15 - 02/14/24	22	84	CI around median	0.001	0.0110	Background	No Exceedance
G212	UA	E004	Barium, total	mg/L	11/18/15 - 02/14/24	22	0	CI around mean	0.0487	2.0	Standard	No Exceedance
G212	UA	E004	Beryllium, total	mg/L	11/18/15 - 02/14/24	22	97	CI around median	0.001	0.004	Standard	No Exceedance
G212	UA	E004	Boron, total	mg/L	11/18/15 - 02/14/24	29	83	CI around median	0.01	2	Standard	No Exceedance
G212	UA	E004	Cadmium, total	mg/L	11/18/15 - 02/14/24	22	98	CI around median	0.001	0.005	Standard	No Exceedance
G212	UA	E004	Chloride, total	mg/L	11/18/15 - 02/14/24	29	0	CB around linear reg	43.6	200	Standard	No Exceedance
G212	UA	E004	Chromium, total	mg/L	11/18/15 - 02/14/24	22	85	CB around T-S line	0.00373	0.1	Standard	No Exceedance
G212	UA	E004	Cobalt, total	mg/L	11/18/15 - 02/14/24	22	97	CB around T-S line	0.00189	0.006	Standard	No Exceedance
G212	UA	E004	Fluoride, total	mg/L	11/18/15 - 02/14/24	29	12	CI around median	0.32	4.0	Standard	No Exceedance
G212	UA	E004	Lead, total	mg/L	11/18/15 - 02/14/24	22	84	CI around median	0.001	0.0075	Standard	No Exceedance
G212	UA	E004	Lithium, total	mg/L	11/18/15 - 02/14/24	15	100	All ND - Last	0.003	0.04	Standard	No Exceedance
G212	UA	E004	Mercury, total	mg/L	11/18/15 - 02/14/24	22	97	CI around median	0.0002	0.002	Standard	No Exceedance
G212	UA	E004	Molybdenum, total	mg/L	11/18/15 - 02/14/24	22	71	CI around median	0.001	0.1	Standard	No Exceedance
G212	UA	E004	pH (field)	SU	11/18/15 - 02/14/24	30	0	CI around mean	7.1/7.3	6.5/9.0	Standard/Standard	No Exceedance
G212	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 02/14/24	15	0	CI around mean	0.403	5	Standard	No Exceedance
G212	UA	E004	Selenium, total	mg/L	11/18/15 - 02/14/24	22	15	CB around linear reg	-3.03e-05	0.05	Standard	No Exceedance
G212	UA	E004	Sulfate, total	mg/L	11/18/15 - 02/14/24	29	0	CI around mean	53.3	400	Standard	No Exceedance
G212	UA	E004	Thallium, total	mg/L	11/18/15 - 02/14/24	22	97	CI around median	0.001	0.002	Standard	No Exceedance
G212	UA	E004	Total Dissolved Solids	mg/L	11/18/15 - 02/14/24	29	0	CI around geomean	381	1,200	Standard	No Exceedance
G213	UA	E004	Antimony, total	mg/L	10/13/20 - 02/14/24	14	100	All ND - Last	0.001	0.006	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G213	UA	E004	Arsenic, total	mg/L	10/13/20 - 02/14/24	14	70	CI around median	0.001	0.0110	Background	No Exceedance
G213	UA	E004	Barium, total	mg/L	10/13/20 - 02/14/24	14	0	CI around mean	0.046	2.0	Standard	No Exceedance
G213	UA	E004	Beryllium, total	mg/L	10/13/20 - 02/14/24	14	92	Most recent sample	0.001	0.004	Standard	No Exceedance
G213	UA	E004	Boron, total	mg/L	10/13/20 - 02/14/24	14	89	CI around median	0.01	2	Standard	No Exceedance
G213	UA	E004	Cadmium, total	mg/L	10/13/20 - 02/14/24	14	97	Most recent sample	0.001	0.005	Standard	No Exceedance
G213	UA	E004	Chloride, total	mg/L	10/13/20 - 02/14/24	14	0	CI around mean	41.8	200	Standard	No Exceedance
G213	UA	E004	Chromium, total	mg/L	10/13/20 - 02/14/24	14	62	CI around median	0.004	0.1	Standard	No Exceedance
G213	UA	E004	Cobalt, total	mg/L	10/13/20 - 02/14/24	14	85	CB around T-S line	0.000818	0.006	Standard	No Exceedance
G213	UA	E004	Fluoride, total	mg/L	10/13/20 - 02/14/24	14	8	CI around median	0.267	4.0	Standard	No Exceedance
G213	UA	E004	Lead, total	mg/L	10/13/20 - 02/14/24	14	70	CI around median	0.001	0.0075	Standard	No Exceedance
G213	UA	E004	Lithium, total	mg/L	02/15/23 - 02/14/24	5	40	CI around geomean	0.00316	0.04	Standard	No Exceedance
G213	UA	E004	Mercury, total	mg/L	10/13/20 - 02/14/24	14	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G213	UA	E004	Molybdenum, total	mg/L	10/13/20 - 02/14/24	14	88	CB around T-S line	0.001	0.1	Standard	No Exceedance
G213	UA	E004	pH (field)	SU	10/13/20 - 02/14/24	14	0	CI around mean	7.0/7.2	6.5/9.0	Standard/Standard	No Exceedance
G213	UA	E004	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 02/14/24	5	0	CI around mean	-0.461	5	Standard	No Exceedance
G213	UA	E004	Selenium, total	mg/L	10/13/20 - 02/14/24	14	27	CI around median	0.001	0.05	Standard	No Exceedance
G213	UA	E004	Sulfate, total	mg/L	10/13/20 - 02/14/24	14	0	CB around linear reg	59.8	400	Standard	No Exceedance
G213	UA	E004	Thallium, total	mg/L	10/13/20 - 02/14/24	14	96	CB around T-S line	0.001	0.002	Standard	No Exceedance
G213	UA	E004	Total Dissolved Solids	mg/L	10/13/20 - 02/14/24	14	0	CI around mean	373	1,200	Standard	No Exceedance
G215	UA	E004	Antimony, total	mg/L	11/24/15 - 02/13/24	22	97	CB around T-S line	0.00223	0.006	Standard	No Exceedance
G215	UA	E004	Arsenic, total	mg/L	11/24/15 - 02/13/24	22	20	CI around geomean	0.00439	0.0110	Background	No Exceedance
G215	UA	E004	Barium, total	mg/L	11/24/15 - 02/13/24	22	0	CB around linear reg	0.00756	2.0	Standard	No Exceedance
G215	UA	E004	Beryllium, total	mg/L	11/24/15 - 02/13/24	22	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G215	UA	E004	Boron, total	mg/L	11/24/15 - 02/13/24	30	24	CB around linear reg	0.629	2	Standard	No Exceedance
G215	UA	E004	Cadmium, total	mg/L	11/24/15 - 02/13/24	22	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G215	UA	E004	Chloride, total	mg/L	11/24/15 - 02/13/24	30	0	CB around T-S line	92.3	200	Standard	No Exceedance
G215	UA	E004	Chromium, total	mg/L	11/24/15 - 02/13/24	22	91	CB around T-S line	0.00373	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G215	UA	E004	Cobalt, total	mg/L	11/24/15 - 02/13/24	22	91	CB around T-S line	0.00154	0.006	Standard	No Exceedance
G215	UA	E004	Fluoride, total	mg/L	11/24/15 - 02/13/24	30	14	CB around linear reg	0.149	4.0	Standard	No Exceedance
G215	UA	E004	Lead, total	mg/L	11/24/15 - 02/13/24	22	84	CI around median	0.001	0.0075	Standard	No Exceedance
G215	UA	E004	Lithium, total	mg/L	11/24/15 - 02/13/24	15	80	CI around median	0.0096	0.04	Standard	No Exceedance
G215	UA	E004	Mercury, total	mg/L	11/24/15 - 02/13/24	22	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G215	UA	E004	Molybdenum, total	mg/L	11/24/15 - 02/13/24	22	88	CI around median	0.001	0.1	Standard	No Exceedance
G215	UA	E004	pH (field)	SU	11/24/15 - 02/13/24	32	0	CI around mean	6.9/7.1	6.5/9.0	Standard/Standard	No Exceedance
G215	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 02/13/24	15	0	CI around mean	0.488	5	Standard	No Exceedance
G215	UA	E004	Selenium, total	mg/L	11/24/15 - 02/13/24	22	91	CI around median	0.001	0.05	Standard	No Exceedance
G215	UA	E004	Sulfate, total	mg/L	11/24/15 - 02/13/24	30	0	CB around linear reg	506	400	Standard	Exceedance
G215	UA	E004	Thallium, total	mg/L	11/24/15 - 02/13/24	22	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G215	UA	E004	Total Dissolved Solids	mg/L	11/24/15 - 02/13/24	30	0	CB around linear reg	1,220	1,200	Standard	Exceedance
G217	UA	E004	Antimony, total	mg/L	10/14/20 - 02/13/24	14	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G217	UA	E004	Arsenic, total	mg/L	10/14/20 - 02/13/24	14	84	CI around median	0.001	0.0110	Background	No Exceedance
G217	UA	E004	Barium, total	mg/L	10/14/20 - 02/13/24	14	0	CI around mean	0.0939	2.0	Standard	No Exceedance
G217	UA	E004	Beryllium, total	mg/L	10/14/20 - 02/13/24	14	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G217	UA	E004	Boron, total	mg/L	10/14/20 - 02/13/24	14	73	CI around median	0.01	2	Standard	No Exceedance
G217	UA	E004	Cadmium, total	mg/L	10/14/20 - 02/13/24	14	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G217	UA	E004	Chloride, total	mg/L	10/14/20 - 02/13/24	14	0	CB around linear reg	109	200	Standard	No Exceedance
G217	UA	E004	Chromium, total	mg/L	10/14/20 - 02/13/24	14	72	CB around T-S line	0.00105	0.1	Standard	No Exceedance
G217	UA	E004	Cobalt, total	mg/L	10/14/20 - 02/13/24	14	88	CB around T-S line	0.000818	0.006	Standard	No Exceedance
G217	UA	E004	Fluoride, total	mg/L	10/14/20 - 02/13/24	14	12	CI around median	0.296	4.0	Standard	No Exceedance
G217	UA	E004	Lead, total	mg/L	10/14/20 - 02/13/24	14	89	CI around median	0.001	0.0075	Standard	No Exceedance
G217	UA	E004	Lithium, total	mg/L	02/15/23 - 02/13/24	5	40	CI around median (Last Sample, n<7)	0.0037	0.04	Standard	No Exceedance
G217	UA	E004	Mercury, total	mg/L	10/14/20 - 02/13/24	14	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G217	UA	E004	Molybdenum, total	mg/L	10/14/20 - 02/13/24	14	88	CB around T-S line	0.001	0.1	Standard	No Exceedance
G217	UA	E004	pH (field)	SU	10/14/20 - 02/13/24	14	0	CI around mean	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G217	UA	E004	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 02/13/24	5	0	CI around mean	0.345	5	Standard	No Exceedance
G217	UA	E004	Selenium, total	mg/L	10/14/20 - 02/13/24	14	76	Most recent sample	0.001	0.05	Standard	No Exceedance
G217	UA	E004	Sulfate, total	mg/L	10/14/20 - 02/13/24	14	0	CB around linear reg	391	400	Standard	No Exceedance
G217	UA	E004	Thallium, total	mg/L	10/14/20 - 02/13/24	14	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G217	UA	E004	Total Dissolved Solids	mg/L	10/14/20 - 02/13/24	14	0	CB around linear reg	982	1,200	Standard	No Exceedance
G218	UA	E004	Antimony, total	mg/L	11/24/15 - 02/13/24	22	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G218	UA	E004	Arsenic, total	mg/L	11/24/15 - 02/13/24	22	22	CI around geomean	0.00132	0.0110	Background	No Exceedance
G218	UA	E004	Barium, total	mg/L	11/24/15 - 02/13/24	22	0	CB around linear reg	0.0798	2.0	Standard	No Exceedance
G218	UA	E004	Beryllium, total	mg/L	11/24/15 - 02/13/24	22	97	CI around median	0.001	0.004	Standard	No Exceedance
G218	UA	E004	Boron, total	mg/L	11/24/15 - 02/13/24	29	77	CB around T-S line	0.01	2	Standard	No Exceedance
G218	UA	E004	Cadmium, total	mg/L	11/24/15 - 02/13/24	22	98	CI around median	0.001	0.005	Standard	No Exceedance
G218	UA	E004	Chloride, total	mg/L	11/24/15 - 02/13/24	29	0	CI around median	84	200	Standard	No Exceedance
G218	UA	E004	Chromium, total	mg/L	11/24/15 - 02/13/24	22	76	CB around T-S line	0.00284	0.1	Standard	No Exceedance
G218	UA	E004	Cobalt, total	mg/L	11/24/15 - 02/13/24	22	88	CI around median	0.002	0.006	Standard	No Exceedance
G218	UA	E004	Fluoride, total	mg/L	11/24/15 - 02/13/24	30	12	CI around mean	0.287	4.0	Standard	No Exceedance
G218	UA	E004	Lead, total	mg/L	11/24/15 - 02/13/24	22	91	CI around median	0.001	0.0075	Standard	No Exceedance
G218	UA	E004	Lithium, total	mg/L	11/24/15 - 02/13/24	15	80	CI around median	0.0047	0.04	Standard	No Exceedance
G218	UA	E004	Mercury, total	mg/L	11/24/15 - 02/13/24	22	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G218	UA	E004	Molybdenum, total	mg/L	11/24/15 - 02/13/24	22	88	CI around median	0.001	0.1	Standard	No Exceedance
G218	UA	E004	pH (field)	SU	11/24/15 - 02/13/24	31	0	CI around mean	6.9/7.0	6.5/9.0	Standard/Standard	No Exceedance
G218	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 02/13/24	15	0	CI around mean	0.6	5	Standard	No Exceedance
G218	UA	E004	Selenium, total	mg/L	11/24/15 - 02/13/24	22	85	CI around median	0.001	0.05	Standard	No Exceedance
G218	UA	E004	Sulfate, total	mg/L	11/24/15 - 02/13/24	29	0	CB around linear reg	327	400	Standard	No Exceedance
G218	UA	E004	Thallium, total	mg/L	11/24/15 - 02/13/24	22	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G218	UA	E004	Total Dissolved Solids	mg/L	11/24/15 - 02/13/24	30	0	CB around linear reg	884	1,200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Notes:

Compliance Result:

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

Exceedance: The statistical result exceeded the GWPS.

HSU = hydrostratigraphic unit:

DA = Deep Aquifer

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 2, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G206	UA	E005	Antimony, total	mg/L	11/18/15 - 04/30/24	23	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G206	UA	E005	Arsenic, total	mg/L	11/18/15 - 04/30/24	23	67	CI around median	0.001	0.0110	Background	No Exceedance
G206	UA	E005	Barium, total	mg/L	11/18/15 - 04/30/24	23	3	CI around mean	0.0483	2.0	Standard	No Exceedance
G206	UA	E005	Beryllium, total	mg/L	11/18/15 - 04/30/24	23	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G206	UA	E005	Boron, total	mg/L	11/18/15 - 04/30/24	30	79	CI around median	0.01	2	Standard	No Exceedance
G206	UA	E005	Cadmium, total	mg/L	11/18/15 - 04/30/24	23	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G206	UA	E005	Chloride, total	mg/L	11/18/15 - 04/30/24	30	0	CB around linear reg	18.9	200	Standard	No Exceedance
G206	UA	E005	Chromium, total	mg/L	11/18/15 - 04/30/24	23	83	CB around T-S line	0.0031	0.1	Standard	No Exceedance
G206	UA	E005	Cobalt, total	mg/L	11/18/15 - 04/30/24	23	97	CB around T-S line	0.00168	0.006	Standard	No Exceedance
G206	UA	E005	Fluoride, total	mg/L	11/18/15 - 04/30/24	31	5	CI around mean	0.386	4.0	Standard	No Exceedance
G206	UA	E005	Lead, total	mg/L	11/18/15 - 04/30/24	23	94	CI around median	0.001	0.0075	Standard	No Exceedance
G206	UA	E005	Lithium, total	mg/L	11/18/15 - 04/30/24	16	100	All ND - Last	0.003	0.04	Standard	No Exceedance
G206	UA	E005	Mercury, total	mg/L	11/18/15 - 04/30/24	23	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G206	UA	E005	Molybdenum, total	mg/L	11/18/15 - 04/30/24	23	64	CI around median	0.001	0.1	Standard	No Exceedance
G206	UA	E005	pH (field)	SU	11/18/15 - 04/30/24	32	0	CI around median	7.1/7.2	6.5/9.0	Standard/Standard	No Exceedance
G206	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 04/30/24	16	0	CI around mean	0.419	5	Standard	No Exceedance
G206	UA	E005	Selenium, total	mg/L	11/18/15 - 04/30/24	23	83	CI around median	0.001	0.05	Standard	No Exceedance
G206	UA	E005	Sulfate, total	mg/L	11/18/15 - 04/30/24	30	0	CB around linear reg	129	400	Standard	No Exceedance
G206	UA	E005	Thallium, total	mg/L	11/18/15 - 04/30/24	23	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G206	UA	E005	Total Dissolved Solids	mg/L	11/18/15 - 04/30/24	30	0	CB around T-S line	484	1,200	Standard	No Exceedance
G206D	DA	E005	Antimony, total	mg/L	03/30/21 - 04/30/24	11	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G206D	DA	E005	Arsenic, total	mg/L	03/30/21 - 04/30/24	11	0	CI around mean	0.00483	0.0110	Background	No Exceedance
G206D	DA	E005	Barium, total	mg/L	03/30/21 - 04/30/24	11	0	CB around linear reg	0.163	2.0	Standard	No Exceedance
G206D	DA	E005	Beryllium, total	mg/L	03/30/21 - 04/30/24	11	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G206D	DA	E005	Boron, total	mg/L	03/30/21 - 04/30/24	11	0	CI around mean	0.115	2	Standard	No Exceedance
G206D	DA	E005	Cadmium, total	mg/L	03/30/21 - 04/30/24	11	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G206D	DA	E005	Chloride, total	mg/L	03/30/21 - 04/30/24	11	0	CB around linear reg	3.88	200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
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COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G206D	DA	E005	Chromium, total	mg/L	03/30/21 - 04/30/24	11	82	CB around T-S line	-0.00434	0.1	Standard	No Exceedance
G206D	DA	E005	Cobalt, total	mg/L	03/30/21 - 04/30/24	11	91	CB around T-S line	-3.9e-05	0.006	Standard	No Exceedance
G206D	DA	E005	Fluoride, total	mg/L	03/30/21 - 04/30/24	11	0	CI around mean	0.707	4.0	Standard	No Exceedance
G206D	DA	E005	Lead, total	mg/L	03/30/21 - 04/30/24	11	82	CI around median	0.001	0.0075	Standard	No Exceedance
G206D	DA	E005	Lithium, total	mg/L	03/30/21 - 04/30/24	11	91	CB around T-S line	-0.00221	0.04	Standard	No Exceedance
G206D	DA	E005	Mercury, total	mg/L	03/30/21 - 04/30/24	11	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G206D	DA	E005	Molybdenum, total	mg/L	03/30/21 - 04/30/24	11	0	CB around linear reg	0.00582	0.1	Standard	No Exceedance
G206D	DA	E005	pH (field)	SU	03/30/21 - 04/30/24	11	0	CI around mean	7.0/7.4	6.5/9.0	Standard/Standard	No Exceedance
G206D	DA	E005	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 04/30/24	12	0	CI around mean	0.28	5	Standard	No Exceedance
G206D	DA	E005	Selenium, total	mg/L	03/30/21 - 04/30/24	11	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G206D	DA	E005	Sulfate, total	mg/L	03/30/21 - 04/30/24	11	0	CB around linear reg	-87.5	400	Standard	No Exceedance
G206D	DA	E005	Thallium, total	mg/L	03/30/21 - 04/30/24	11	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G206D	DA	E005	Total Dissolved Solids	mg/L	03/30/21 - 04/30/24	11	0	CB around linear reg	426	1,200	Standard	No Exceedance
G209	UA	E005	Antimony, total	mg/L	11/18/15 - 05/01/24	23	97	CB around T-S line	0.00236	0.006	Standard	No Exceedance
G209	UA	E005	Arsenic, total	mg/L	11/18/15 - 05/01/24	23	41	CI around geomean	0.00114	0.0110	Background	No Exceedance
G209	UA	E005	Barium, total	mg/L	11/18/15 - 05/01/24	23	0	CI around mean	0.058	2.0	Standard	No Exceedance
G209	UA	E005	Beryllium, total	mg/L	11/18/15 - 05/01/24	23	97	Most recent sample	0.001	0.004	Standard	No Exceedance
G209	UA	E005	Boron, total	mg/L	11/18/15 - 05/01/24	30	58	CI around median	0.01	2	Standard	No Exceedance
G209	UA	E005	Cadmium, total	mg/L	11/18/15 - 05/01/24	23	98	Most recent sample	0.001	0.005	Standard	No Exceedance
G209	UA	E005	Chloride, total	mg/L	11/18/15 - 05/01/24	30	0	CI around median	59	200	Standard	No Exceedance
G209	UA	E005	Chromium, total	mg/L	11/18/15 - 05/01/24	23	69	CB around T-S line	0.00323	0.1	Standard	No Exceedance
G209	UA	E005	Cobalt, total	mg/L	11/18/15 - 05/01/24	23	89	CB around T-S line	0.00168	0.006	Standard	No Exceedance
G209	UA	E005	Fluoride, total	mg/L	11/18/15 - 05/01/24	31	2	CI around mean	0.409	4.0	Standard	No Exceedance
G209	UA	E005	Lead, total	mg/L	11/18/15 - 05/01/24	23	87	CI around median	0.001	0.0075	Standard	No Exceedance
G209	UA	E005	Lithium, total	mg/L	11/18/15 - 05/01/24	16	75	CI around median	0.0058	0.04	Standard	No Exceedance
G209	UA	E005	Mercury, total	mg/L	11/18/15 - 05/01/24	23	97	Most recent sample	0.0002	0.002	Standard	No Exceedance
G209	UA	E005	Molybdenum, total	mg/L	11/18/15 - 05/01/24	23	8	CB around linear reg	0.00203	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G209	UA	E005	pH (field)	SU	11/18/15 - 05/01/24	34	0	CI around mean	7.0/7.2	6.5/9.0	Standard/Standard	No Exceedance
G209	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 05/01/24	16	0	CI around mean	0.494	5	Standard	No Exceedance
G209	UA	E005	Selenium, total	mg/L	11/18/15 - 05/01/24	23	63	CI around median	0.001	0.05	Standard	No Exceedance
G209	UA	E005	Sulfate, total	mg/L	11/18/15 - 05/01/24	30	0	CB around T-S line	214	400	Standard	No Exceedance
G209	UA	E005	Thallium, total	mg/L	11/18/15 - 05/01/24	23	94	CB around T-S line	0.001	0.002	Standard	No Exceedance
G209	UA	E005	Total Dissolved Solids	mg/L	11/18/15 - 05/01/24	30	0	CB around linear reg	814	1,200	Standard	No Exceedance
G212	UA	E005	Antimony, total	mg/L	11/18/15 - 05/01/24	23	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G212	UA	E005	Arsenic, total	mg/L	11/18/15 - 05/01/24	23	85	CI around median	0.001	0.0110	Background	No Exceedance
G212	UA	E005	Barium, total	mg/L	11/18/15 - 05/01/24	23	0	CI around mean	0.049	2.0	Standard	No Exceedance
G212	UA	E005	Beryllium, total	mg/L	11/18/15 - 05/01/24	23	97	CI around median	0.001	0.004	Standard	No Exceedance
G212	UA	E005	Boron, total	mg/L	11/18/15 - 05/01/24	30	83	CI around median	0.01	2	Standard	No Exceedance
G212	UA	E005	Cadmium, total	mg/L	11/18/15 - 05/01/24	23	98	CI around median	0.001	0.005	Standard	No Exceedance
G212	UA	E005	Chloride, total	mg/L	11/18/15 - 05/01/24	30	0	CB around linear reg	43.6	200	Standard	No Exceedance
G212	UA	E005	Chromium, total	mg/L	11/18/15 - 05/01/24	23	86	CB around T-S line	0.0032	0.1	Standard	No Exceedance
G212	UA	E005	Cobalt, total	mg/L	11/18/15 - 05/01/24	23	97	CB around T-S line	0.00168	0.006	Standard	No Exceedance
G212	UA	E005	Fluoride, total	mg/L	11/18/15 - 05/01/24	30	12	CI around median	0.32	4.0	Standard	No Exceedance
G212	UA	E005	Lead, total	mg/L	11/18/15 - 05/01/24	23	85	CI around median	0.001	0.0075	Standard	No Exceedance
G212	UA	E005	Lithium, total	mg/L	11/18/15 - 05/01/24	16	100	All ND - Last	0.003	0.04	Standard	No Exceedance
G212	UA	E005	Mercury, total	mg/L	11/18/15 - 05/01/24	23	97	CI around median	0.0002	0.002	Standard	No Exceedance
G212	UA	E005	Molybdenum, total	mg/L	11/18/15 - 05/01/24	23	72	CI around median	0.001	0.1	Standard	No Exceedance
G212	UA	E005	pH (field)	SU	11/18/15 - 05/01/24	31	0	CI around mean	7.1/7.3	6.5/9.0	Standard/Standard	No Exceedance
G212	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 05/01/24	16	0	CI around mean	0.44	5	Standard	No Exceedance
G212	UA	E005	Selenium, total	mg/L	11/18/15 - 05/01/24	23	14	CB around linear reg	-5.18e-05	0.05	Standard	No Exceedance
G212	UA	E005	Sulfate, total	mg/L	11/18/15 - 05/01/24	30	0	CI around mean	53.5	400	Standard	No Exceedance
G212	UA	E005	Thallium, total	mg/L	11/18/15 - 05/01/24	23	97	CB around T-S line	0.001	0.002	Standard	No Exceedance
G212	UA	E005	Total Dissolved Solids	mg/L	11/18/15 - 05/01/24	30	0	CB around linear reg	395	1,200	Standard	No Exceedance
G213	UA	E005	Antimony, total	mg/L	10/13/20 - 05/06/24	15	100	All ND - Last	0.001	0.006	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G213	UA	E005	Arsenic, total	mg/L	10/13/20 - 05/06/24	15	68	CI around median	0.001	0.0110	Background	No Exceedance
G213	UA	E005	Barium, total	mg/L	10/13/20 - 05/06/24	15	0	CI around mean	0.0466	2.0	Standard	No Exceedance
G213	UA	E005	Beryllium, total	mg/L	10/13/20 - 05/06/24	15	93	Most recent sample	0.001	0.004	Standard	No Exceedance
G213	UA	E005	Boron, total	mg/L	10/13/20 - 05/06/24	15	90	CB around T-S line	0.01	2	Standard	No Exceedance
G213	UA	E005	Cadmium, total	mg/L	10/13/20 - 05/06/24	15	97	Most recent sample	0.001	0.005	Standard	No Exceedance
G213	UA	E005	Chloride, total	mg/L	10/13/20 - 05/06/24	15	0	CI around mean	42.1	200	Standard	No Exceedance
G213	UA	E005	Chromium, total	mg/L	10/13/20 - 05/06/24	15	59	CI around median	0.004	0.1	Standard	No Exceedance
G213	UA	E005	Cobalt, total	mg/L	10/13/20 - 05/06/24	15	85	CB around T-S line	0.000727	0.006	Standard	No Exceedance
G213	UA	E005	Fluoride, total	mg/L	10/13/20 - 05/06/24	15	7	CI around median	0.267	4.0	Standard	No Exceedance
G213	UA	E005	Lead, total	mg/L	10/13/20 - 05/06/24	15	68	CI around median	0.001	0.0075	Standard	No Exceedance
G213	UA	E005	Lithium, total	mg/L	02/15/23 - 05/06/24	6	33	CI around median (Last Sample, n<7)	0.0042	0.04	Standard	No Exceedance
G213	UA	E005	Mercury, total	mg/L	10/13/20 - 05/06/24	15	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G213	UA	E005	Molybdenum, total	mg/L	10/13/20 - 05/06/24	15	82	CB around T-S line	0.001	0.1	Standard	No Exceedance
G213	UA	E005	pH (field)	SU	10/13/20 - 05/06/24	15	0	CI around mean	7.0/7.2	6.5/9.0	Standard/Standard	No Exceedance
G213	UA	E005	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 05/06/24	6	0	CI around mean	-0.141	5	Standard	No Exceedance
G213	UA	E005	Selenium, total	mg/L	10/13/20 - 05/06/24	15	26	CI around median	0.001	0.05	Standard	No Exceedance
G213	UA	E005	Sulfate, total	mg/L	10/13/20 - 05/06/24	15	0	CB around linear reg	62.5	400	Standard	No Exceedance
G213	UA	E005	Thallium, total	mg/L	10/13/20 - 05/06/24	15	96	CB around T-S line	0.001	0.002	Standard	No Exceedance
G213	UA	E005	Total Dissolved Solids	mg/L	10/13/20 - 05/06/24	15	0	CI around mean	375	1,200	Standard	No Exceedance
G215	UA	E005	Antimony, total	mg/L	11/24/15 - 04/30/24	23	97	CB around T-S line	0.00215	0.006	Standard	No Exceedance
G215	UA	E005	Arsenic, total	mg/L	11/24/15 - 04/30/24	23	20	CB around T-S line	-0.0286	0.0110	Background	No Exceedance
G215	UA	E005	Barium, total	mg/L	11/24/15 - 04/30/24	23	0	CB around linear reg	0.00672	2.0	Standard	No Exceedance
G215	UA	E005	Beryllium, total	mg/L	11/24/15 - 04/30/24	23	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G215	UA	E005	Boron, total	mg/L	11/24/15 - 04/30/24	31	24	CB around linear reg	0.667	2	Standard	No Exceedance
G215	UA	E005	Cadmium, total	mg/L	11/24/15 - 04/30/24	23	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G215	UA	E005	Chloride, total	mg/L	11/24/15 - 04/30/24	31	0	CB around T-S line	96	200	Standard	No Exceedance
G215	UA	E005	Chromium, total	mg/L	11/24/15 - 04/30/24	23	91	CB around T-S line	0.0032	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G215	UA	E005	Cobalt, total	mg/L	11/24/15 - 04/30/24	23	91	CB around T-S line	0.00116	0.006	Standard	No Exceedance
G215	UA	E005	Fluoride, total	mg/L	11/24/15 - 04/30/24	31	14	CB around T-S line	0.184	4.0	Standard	No Exceedance
G215	UA	E005	Lead, total	mg/L	11/24/15 - 04/30/24	23	85	CI around median	0.001	0.0075	Standard	No Exceedance
G215	UA	E005	Lithium, total	mg/L	11/24/15 - 04/30/24	16	75	CI around median	0.0096	0.04	Standard	No Exceedance
G215	UA	E005	Mercury, total	mg/L	11/24/15 - 04/30/24	23	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G215	UA	E005	Molybdenum, total	mg/L	11/24/15 - 04/30/24	23	88	CI around median	0.001	0.1	Standard	No Exceedance
G215	UA	E005	pH (field)	SU	11/24/15 - 04/30/24	33	0	CI around mean	6.9/7.1	6.5/9.0	Standard/Standard	No Exceedance
G215	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 04/30/24	16	0	CI around mean	0.458	5	Standard	No Exceedance
G215	UA	E005	Selenium, total	mg/L	11/24/15 - 04/30/24	23	91	CI around median	0.001	0.05	Standard	No Exceedance
G215	UA	E005	Sulfate, total	mg/L	11/24/15 - 04/30/24	31	0	CB around linear reg	519	400	Standard	Exceedance
G215	UA	E005	Thallium, total	mg/L	11/24/15 - 04/30/24	23	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G215	UA	E005	Total Dissolved Solids	mg/L	11/24/15 - 04/30/24	31	0	CB around linear reg	1,240	1,200	Standard	Exceedance
G217	UA	E005	Antimony, total	mg/L	10/14/20 - 05/02/24	15	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G217	UA	E005	Arsenic, total	mg/L	10/14/20 - 05/02/24	15	84	CI around median	0.001	0.0110	Background	No Exceedance
G217	UA	E005	Barium, total	mg/L	10/14/20 - 05/02/24	15	0	CI around mean	0.0925	2.0	Standard	No Exceedance
G217	UA	E005	Beryllium, total	mg/L	10/14/20 - 05/02/24	15	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G217	UA	E005	Boron, total	mg/L	10/14/20 - 05/02/24	15	71	CB around T-S line	0.01	2	Standard	No Exceedance
G217	UA	E005	Cadmium, total	mg/L	10/14/20 - 05/02/24	15	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G217	UA	E005	Chloride, total	mg/L	10/14/20 - 05/02/24	15	0	CB around linear reg	114	200	Standard	No Exceedance
G217	UA	E005	Chromium, total	mg/L	10/14/20 - 05/02/24	15	69	CB around T-S line	0.000938	0.1	Standard	No Exceedance
G217	UA	E005	Cobalt, total	mg/L	10/14/20 - 05/02/24	15	88	CB around T-S line	0.00073	0.006	Standard	No Exceedance
G217	UA	E005	Fluoride, total	mg/L	10/14/20 - 05/02/24	15	12	CI around median	0.296	4.0	Standard	No Exceedance
G217	UA	E005	Lead, total	mg/L	10/14/20 - 05/02/24	15	90	CI around median	0.001	0.0075	Standard	No Exceedance
G217	UA	E005	Lithium, total	mg/L	02/15/23 - 05/02/24	6	33	CI around median (Last Sample, n<7)	0.0037	0.04	Standard	No Exceedance
G217	UA	E005	Mercury, total	mg/L	10/14/20 - 05/02/24	15	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G217	UA	E005	Molybdenum, total	mg/L	10/14/20 - 05/02/24	15	88	CB around T-S line	0.001	0.1	Standard	No Exceedance
G217	UA	E005	pH (field)	SU	10/14/20 - 05/02/24	15	0	CI around mean	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G217	UA	E005	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 05/02/24	6	0	CI around mean	0.314	5	Standard	No Exceedance
G217	UA	E005	Selenium, total	mg/L	10/14/20 - 05/02/24	15	77	Most recent sample	0.001	0.05	Standard	No Exceedance
G217	UA	E005	Sulfate, total	mg/L	10/14/20 - 05/02/24	15	0	CB around linear reg	414	400	Standard	Exceedance
G217	UA	E005	Thallium, total	mg/L	10/14/20 - 05/02/24	15	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G217	UA	E005	Total Dissolved Solids	mg/L	10/14/20 - 05/02/24	15	0	CB around linear reg	1,030	1,200	Standard	No Exceedance
G218	UA	E005	Antimony, total	mg/L	11/24/15 - 05/02/24	23	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G218	UA	E005	Arsenic, total	mg/L	11/24/15 - 05/02/24	23	22	CI around geomean	0.00131	0.0110	Background	No Exceedance
G218	UA	E005	Barium, total	mg/L	11/24/15 - 05/02/24	23	0	CB around linear reg	0.0764	2.0	Standard	No Exceedance
G218	UA	E005	Beryllium, total	mg/L	11/24/15 - 05/02/24	23	97	CI around median	0.001	0.004	Standard	No Exceedance
G218	UA	E005	Boron, total	mg/L	11/24/15 - 05/02/24	30	77	CB around T-S line	0.01	2	Standard	No Exceedance
G218	UA	E005	Cadmium, total	mg/L	11/24/15 - 05/02/24	23	98	CI around median	0.001	0.005	Standard	No Exceedance
G218	UA	E005	Chloride, total	mg/L	11/24/15 - 05/02/24	30	0	CI around median	84	200	Standard	No Exceedance
G218	UA	E005	Chromium, total	mg/L	11/24/15 - 05/02/24	23	74	CB around T-S line	0.00215	0.1	Standard	No Exceedance
G218	UA	E005	Cobalt, total	mg/L	11/24/15 - 05/02/24	23	89	CB around T-S line	0.00168	0.006	Standard	No Exceedance
G218	UA	E005	Fluoride, total	mg/L	11/24/15 - 05/02/24	31	12	CI around mean	0.288	4.0	Standard	No Exceedance
G218	UA	E005	Lead, total	mg/L	11/24/15 - 05/02/24	23	91	CI around median	0.001	0.0075	Standard	No Exceedance
G218	UA	E005	Lithium, total	mg/L	11/24/15 - 05/02/24	16	75	CI around median	0.0048	0.04	Standard	No Exceedance
G218	UA	E005	Mercury, total	mg/L	11/24/15 - 05/02/24	23	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G218	UA	E005	Molybdenum, total	mg/L	11/24/15 - 05/02/24	23	88	CI around median	0.001	0.1	Standard	No Exceedance
G218	UA	E005	pH (field)	SU	11/24/15 - 05/02/24	32	0	CI around mean	6.9/7.0	6.5/9.0	Standard/Standard	No Exceedance
G218	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 05/02/24	16	0	CI around mean	0.569	5	Standard	No Exceedance
G218	UA	E005	Selenium, total	mg/L	11/24/15 - 05/02/24	23	86	CI around median	0.001	0.05	Standard	No Exceedance
G218	UA	E005	Sulfate, total	mg/L	11/24/15 - 05/02/24	30	0	CB around linear reg	341	400	Standard	No Exceedance
G218	UA	E005	Thallium, total	mg/L	11/24/15 - 05/02/24	23	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G218	UA	E005	Total Dissolved Solids	mg/L	11/24/15 - 05/02/24	31	0	CB around linear reg	910	1,200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Notes:

Compliance Result:

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

Exceedance: The statistical result exceeded the GWPS.

HSU = hydrostratigraphic unit:

DA = Deep Aquifer

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
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G206	UA	E006	Antimony, total	mg/L	11/18/15 - 07/30/24	24	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G206	UA	E006	Arsenic, total	mg/L	11/18/15 - 07/30/24	24	66	CI around median	0.001	0.0110	Background	No Exceedance
G206	UA	E006	Barium, total	mg/L	11/18/15 - 07/30/24	24	3	CI around mean	0.0489	2.0	Standard	No Exceedance
G206	UA	E006	Beryllium, total	mg/L	11/18/15 - 07/30/24	24	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G206	UA	E006	Boron, total	mg/L	11/18/15 - 07/30/24	31	80	CI around median	0.01	2	Standard	No Exceedance
G206	UA	E006	Cadmium, total	mg/L	11/18/15 - 07/30/24	24	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G206	UA	E006	Chloride, total	mg/L	11/18/15 - 07/30/24	31	0	CB around linear reg	19	200	Standard	No Exceedance
G206	UA	E006	Chromium, total	mg/L	11/18/15 - 07/30/24	24	81	CB around T-S line	0.00296	0.1	Standard	No Exceedance
G206	UA	E006	Cobalt, total	mg/L	11/18/15 - 07/30/24	24	97	CB around T-S line	0.00149	0.006	Standard	No Exceedance
G206	UA	E006	Fluoride, total	mg/L	11/18/15 - 07/30/24	32	7	CI around mean	0.379	4.0	Standard	No Exceedance
G206	UA	E006	Lead, total	mg/L	11/18/15 - 07/30/24	24	94	CI around median	0.001	0.0075	Standard	No Exceedance
G206	UA	E006	Lithium, total	mg/L	11/18/15 - 07/30/24	17	100	All ND - Last	0.003	0.04	Standard	No Exceedance
G206	UA	E006	Mercury, total	mg/L	11/18/15 - 07/30/24	24	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G206	UA	E006	Molybdenum, total	mg/L	11/18/15 - 07/30/24	24	65	CI around median	0.001	0.1	Standard	No Exceedance
G206	UA	E006	pH (field)	SU	11/18/15 - 07/30/24	33	0	CI around median	7.1/7.2	6.5/9.0	Standard/Standard	No Exceedance
G206	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 07/30/24	17	0	CI around mean	0.434	5	Standard	No Exceedance
G206	UA	E006	Selenium, total	mg/L	11/18/15 - 07/30/24	24	83	CI around median	0.001	0.05	Standard	No Exceedance
G206	UA	E006	Sulfate, total	mg/L	11/18/15 - 07/30/24	31	0	CB around linear reg	132	400	Standard	No Exceedance
G206	UA	E006	Thallium, total	mg/L	11/18/15 - 07/30/24	24	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G206	UA	E006	Total Dissolved Solids	mg/L	11/18/15 - 07/30/24	31	0	CB around T-S line	483	1,200	Standard	No Exceedance
G206D	DA	E006	Antimony, total	mg/L	03/30/21 - 07/30/24	12	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G206D	DA	E006	Arsenic, total	mg/L	03/30/21 - 07/30/24	12	0	CI around mean	0.00546	0.0110	Background	No Exceedance
G206D	DA	E006	Barium, total	mg/L	03/30/21 - 07/30/24	12	0	CB around linear reg	0.172	2.0	Standard	No Exceedance
G206D	DA	E006	Beryllium, total	mg/L	03/30/21 - 07/30/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G206D	DA	E006	Boron, total	mg/L	03/30/21 - 07/30/24	12	0	CI around mean	0.114	2	Standard	No Exceedance
G206D	DA	E006	Cadmium, total	mg/L	03/30/21 - 07/30/24	12	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G206D	DA	E006	Chloride, total	mg/L	03/30/21 - 07/30/24	12	0	CB around linear reg	3.01	200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G206D	DA	E006	Chromium, total	mg/L	03/30/21 - 07/30/24	12	75	CB around T-S line	-0.00312	0.1	Standard	No Exceedance
G206D	DA	E006	Cobalt, total	mg/L	03/30/21 - 07/30/24	12	92	CB around T-S line	0.000401	0.006	Standard	No Exceedance
G206D	DA	E006	Fluoride, total	mg/L	03/30/21 - 07/30/24	12	0	CI around mean	0.727	4.0	Standard	No Exceedance
G206D	DA	E006	Lead, total	mg/L	03/30/21 - 07/30/24	12	83	CI around median	0.001	0.0075	Standard	No Exceedance
G206D	DA	E006	Lithium, total	mg/L	03/30/21 - 07/30/24	12	92	CB around T-S line	-0.00279	0.04	Standard	No Exceedance
G206D	DA	E006	Mercury, total	mg/L	03/30/21 - 07/30/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G206D	DA	E006	Molybdenum, total	mg/L	03/30/21 - 07/30/24	12	0	CB around linear reg	0.00344	0.1	Standard	No Exceedance
G206D	DA	E006	pH (field)	SU	03/30/21 - 07/30/24	12	0	CI around mean	7.0/7.3	6.5/9.0	Standard/Standard	No Exceedance
G206D	DA	E006	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 07/30/24	13	0	CI around mean	0.326	5	Standard	No Exceedance
G206D	DA	E006	Selenium, total	mg/L	03/30/21 - 07/30/24	12	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G206D	DA	E006	Sulfate, total	mg/L	03/30/21 - 07/30/24	12	0	CB around linear reg	-87.7	400	Standard	No Exceedance
G206D	DA	E006	Thallium, total	mg/L	03/30/21 - 07/30/24	12	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G206D	DA	E006	Total Dissolved Solids	mg/L	03/30/21 - 07/30/24	12	0	CB around linear reg	403	1,200	Standard	No Exceedance
G209	UA	E006	Antimony, total	mg/L	11/18/15 - 07/30/24	24	97	CB around T-S line	0.00198	0.006	Standard	No Exceedance
G209	UA	E006	Arsenic, total	mg/L	11/18/15 - 07/30/24	24	40	CI around geomean	0.00114	0.0110	Background	No Exceedance
G209	UA	E006	Barium, total	mg/L	11/18/15 - 07/30/24	24	0	CI around mean	0.0586	2.0	Standard	No Exceedance
G209	UA	E006	Beryllium, total	mg/L	11/18/15 - 07/30/24	24	97	Most recent sample	0.001	0.004	Standard	No Exceedance
G209	UA	E006	Boron, total	mg/L	11/18/15 - 07/30/24	31	59	CI around median	0.01	2	Standard	No Exceedance
G209	UA	E006	Cadmium, total	mg/L	11/18/15 - 07/30/24	24	98	Most recent sample	0.001	0.005	Standard	No Exceedance
G209	UA	E006	Chloride, total	mg/L	11/18/15 - 07/30/24	31	0	CB around T-S line	53.5	200	Standard	No Exceedance
G209	UA	E006	Chromium, total	mg/L	11/18/15 - 07/30/24	24	69	CB around T-S line	0.00271	0.1	Standard	No Exceedance
G209	UA	E006	Cobalt, total	mg/L	11/18/15 - 07/30/24	24	89	CB around T-S line	0.00149	0.006	Standard	No Exceedance
G209	UA	E006	Fluoride, total	mg/L	11/18/15 - 07/30/24	32	4	CI around mean	0.401	4.0	Standard	No Exceedance
G209	UA	E006	Lead, total	mg/L	11/18/15 - 07/30/24	24	87	CI around median	0.001	0.0075	Standard	No Exceedance
G209	UA	E006	Lithium, total	mg/L	11/18/15 - 07/30/24	17	71	CI around median	0.0057	0.04	Standard	No Exceedance
G209	UA	E006	Mercury, total	mg/L	11/18/15 - 07/30/24	24	97	Most recent sample	0.0002	0.002	Standard	No Exceedance
G209	UA	E006	Molybdenum, total	mg/L	11/18/15 - 07/30/24	24	8	CB around linear reg	0.00208	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G209	UA	E006	pH (field)	SU	11/18/15 - 07/30/24	35	0	CI around mean	7.0/7.1	6.5/9.0	Standard/Standard	No Exceedance
G209	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 07/30/24	17	0	CI around mean	0.496	5	Standard	No Exceedance
G209	UA	E006	Selenium, total	mg/L	11/18/15 - 07/30/24	24	64	CI around median	0.001	0.05	Standard	No Exceedance
G209	UA	E006	Sulfate, total	mg/L	11/18/15 - 07/30/24	31	0	CB around T-S line	217	400	Standard	No Exceedance
G209	UA	E006	Thallium, total	mg/L	11/18/15 - 07/30/24	24	94	CB around T-S line	0.001	0.002	Standard	No Exceedance
G209	UA	E006	Total Dissolved Solids	mg/L	11/18/15 - 07/30/24	31	0	CB around linear reg	816	1,200	Standard	No Exceedance
G212	UA	E006	Antimony, total	mg/L	11/18/15 - 08/01/24	24	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G212	UA	E006	Arsenic, total	mg/L	11/18/15 - 08/01/24	24	85	CI around median	0.001	0.0110	Background	No Exceedance
G212	UA	E006	Barium, total	mg/L	11/18/15 - 08/01/24	24	0	CI around mean	0.0491	2.0	Standard	No Exceedance
G212	UA	E006	Beryllium, total	mg/L	11/18/15 - 08/01/24	24	97	CI around median	0.001	0.004	Standard	No Exceedance
G212	UA	E006	Boron, total	mg/L	11/18/15 - 08/01/24	31	83	CI around median	0.01	2	Standard	No Exceedance
G212	UA	E006	Cadmium, total	mg/L	11/18/15 - 08/01/24	24	98	CI around median	0.001	0.005	Standard	No Exceedance
G212	UA	E006	Chloride, total	mg/L	11/18/15 - 08/01/24	31	0	CB around linear reg	44.2	200	Standard	No Exceedance
G212	UA	E006	Chromium, total	mg/L	11/18/15 - 08/01/24	24	86	CB around T-S line	0.00272	0.1	Standard	No Exceedance
G212	UA	E006	Cobalt, total	mg/L	11/18/15 - 08/01/24	24	97	CB around T-S line	0.00149	0.006	Standard	No Exceedance
G212	UA	E006	Fluoride, total	mg/L	11/18/15 - 08/01/24	31	14	CB around linear reg	0.186	4.0	Standard	No Exceedance
G212	UA	E006	Lead, total	mg/L	11/18/15 - 08/01/24	24	85	CI around median	0.001	0.0075	Standard	No Exceedance
G212	UA	E006	Lithium, total	mg/L	11/18/15 - 08/01/24	17	100	All ND - Last	0.003	0.04	Standard	No Exceedance
G212	UA	E006	Mercury, total	mg/L	11/18/15 - 08/01/24	24	97	CI around median	0.0002	0.002	Standard	No Exceedance
G212	UA	E006	Molybdenum, total	mg/L	11/18/15 - 08/01/24	24	73	CI around median	0.001	0.1	Standard	No Exceedance
G212	UA	E006	pH (field)	SU	11/18/15 - 08/01/24	32	0	CI around mean	7.1/7.3	6.5/9.0	Standard/Standard	No Exceedance
G212	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 08/01/24	17	0	CI around mean	0.459	5	Standard	No Exceedance
G212	UA	E006	Selenium, total	mg/L	11/18/15 - 08/01/24	24	17	CB around T-S line	0.000106	0.05	Standard	No Exceedance
G212	UA	E006	Sulfate, total	mg/L	11/18/15 - 08/01/24	31	0	CI around mean	53.7	400	Standard	No Exceedance
G212	UA	E006	Thallium, total	mg/L	11/18/15 - 08/01/24	24	97	CB around T-S line	0.001	0.002	Standard	No Exceedance
G212	UA	E006	Total Dissolved Solids	mg/L	11/18/15 - 08/01/24	31	0	CB around T-S line	397	1,200	Standard	No Exceedance
G213	UA	E006	Antimony, total	mg/L	10/13/20 - 08/01/24	16	100	All ND - Last	0.001	0.006	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G213	UA	E006	Arsenic, total	mg/L	10/13/20 - 08/01/24	16	69	CI around median	0.001	0.0110	Background	No Exceedance
G213	UA	E006	Barium, total	mg/L	10/13/20 - 08/01/24	16	0	CI around mean	0.0469	2.0	Standard	No Exceedance
G213	UA	E006	Beryllium, total	mg/L	10/13/20 - 08/01/24	16	93	Most recent sample	0.001	0.004	Standard	No Exceedance
G213	UA	E006	Boron, total	mg/L	10/13/20 - 08/01/24	16	90	CB around T-S line	0.01	2	Standard	No Exceedance
G213	UA	E006	Cadmium, total	mg/L	10/13/20 - 08/01/24	16	97	Most recent sample	0.001	0.005	Standard	No Exceedance
G213	UA	E006	Chloride, total	mg/L	10/13/20 - 08/01/24	16	0	CB around linear reg	46.8	200	Standard	No Exceedance
G213	UA	E006	Chromium, total	mg/L	10/13/20 - 08/01/24	16	61	CI around median	0.004	0.1	Standard	No Exceedance
G213	UA	E006	Cobalt, total	mg/L	10/13/20 - 08/01/24	16	86	CB around T-S line	0.000642	0.006	Standard	No Exceedance
G213	UA	E006	Fluoride, total	mg/L	10/13/20 - 08/01/24	16	11	CI around mean	0.263	4.0	Standard	No Exceedance
G213	UA	E006	Lead, total	mg/L	10/13/20 - 08/01/24	16	69	CI around median	0.001	0.0075	Standard	No Exceedance
G213	UA	E006	Lithium, total	mg/L	02/15/23 - 08/01/24	7	29	CI around median	0.0033	0.04	Standard	No Exceedance
G213	UA	E006	Mercury, total	mg/L	10/13/20 - 08/01/24	16	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G213	UA	E006	Molybdenum, total	mg/L	10/13/20 - 08/01/24	16	83	CB around T-S line	0.001	0.1	Standard	No Exceedance
G213	UA	E006	pH (field)	SU	10/13/20 - 08/01/24	16	0	CI around mean	7.0/7.2	6.5/9.0	Standard/Standard	No Exceedance
G213	UA	E006	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 08/01/24	7	0	CI around mean	-0.135	5	Standard	No Exceedance
G213	UA	E006	Selenium, total	mg/L	10/13/20 - 08/01/24	16	29	CI around median	0.001	0.05	Standard	No Exceedance
G213	UA	E006	Sulfate, total	mg/L	10/13/20 - 08/01/24	16	0	CB around linear reg	64.5	400	Standard	No Exceedance
G213	UA	E006	Thallium, total	mg/L	10/13/20 - 08/01/24	16	96	CB around T-S line	0.001	0.002	Standard	No Exceedance
G213	UA	E006	Total Dissolved Solids	mg/L	10/13/20 - 08/01/24	16	0	CI around mean	379	1,200	Standard	No Exceedance
G215	UA	E006	Antimony, total	mg/L	11/24/15 - 08/06/24	24	97	CB around T-S line	0.00145	0.006	Standard	No Exceedance
G215	UA	E006	Arsenic, total	mg/L	11/24/15 - 08/06/24	24	19	CB around T-S line	-0.00794	0.0110	Background	No Exceedance
G215	UA	E006	Barium, total	mg/L	11/24/15 - 08/06/24	24	0	CB around linear reg	0.00446	2.0	Standard	No Exceedance
G215	UA	E006	Beryllium, total	mg/L	11/24/15 - 08/06/24	24	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G215	UA	E006	Boron, total	mg/L	11/24/15 - 08/06/24	32	24	CB around linear reg	0.67	2	Standard	No Exceedance
G215	UA	E006	Cadmium, total	mg/L	11/24/15 - 08/06/24	24	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G215	UA	E006	Chloride, total	mg/L	11/24/15 - 08/06/24	32	0	CB around T-S line	104	200	Standard	No Exceedance
G215	UA	E006	Chromium, total	mg/L	11/24/15 - 08/06/24	24	92	CB around T-S line	0.00272	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G215	UA	E006	Cobalt, total	mg/L	11/24/15 - 08/06/24	24	92	CB around T-S line	0.00126	0.006	Standard	No Exceedance
G215	UA	E006	Fluoride, total	mg/L	11/24/15 - 08/06/24	32	16	CB around T-S line	0.244	4.0	Standard	No Exceedance
G215	UA	E006	Lead, total	mg/L	11/24/15 - 08/06/24	24	85	CI around median	0.001	0.0075	Standard	No Exceedance
G215	UA	E006	Lithium, total	mg/L	11/24/15 - 08/06/24	17	71	CI around median	0.0091	0.04	Standard	No Exceedance
G215	UA	E006	Mercury, total	mg/L	11/24/15 - 08/06/24	24	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G215	UA	E006	Molybdenum, total	mg/L	11/24/15 - 08/06/24	24	88	CB around T-S line	0.001	0.1	Standard	No Exceedance
G215	UA	E006	pH (field)	SU	11/24/15 - 08/06/24	34	0	CI around mean	6.9/7.1	6.5/9.0	Standard/Standard	No Exceedance
G215	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 08/06/24	17	0	CI around mean	0.453	5	Standard	No Exceedance
G215	UA	E006	Selenium, total	mg/L	11/24/15 - 08/06/24	24	92	CI around median	0.001	0.05	Standard	No Exceedance
G215	UA	E006	Sulfate, total	mg/L	11/24/15 - 08/06/24	32	0	CB around linear reg	524	400	Standard	Exceedance
G215	UA	E006	Thallium, total	mg/L	11/24/15 - 08/06/24	24	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G215	UA	E006	Total Dissolved Solids	mg/L	11/24/15 - 08/06/24	32	0	CB around linear reg	1,260	1,200	Standard	Exceedance
G217	UA	E006	Antimony, total	mg/L	10/14/20 - 08/06/24	16	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G217	UA	E006	Arsenic, total	mg/L	10/14/20 - 08/06/24	16	85	CI around median	0.001	0.0110	Background	No Exceedance
G217	UA	E006	Barium, total	mg/L	10/14/20 - 08/06/24	16	0	CI around mean	0.0895	2.0	Standard	No Exceedance
G217	UA	E006	Beryllium, total	mg/L	10/14/20 - 08/06/24	16	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G217	UA	E006	Boron, total	mg/L	10/14/20 - 08/06/24	16	69	CB around T-S line	0.0149	2	Standard	No Exceedance
G217	UA	E006	Cadmium, total	mg/L	10/14/20 - 08/06/24	16	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G217	UA	E006	Chloride, total	mg/L	10/14/20 - 08/06/24	16	0	CB around linear reg	122	200	Standard	No Exceedance
G217	UA	E006	Chromium, total	mg/L	10/14/20 - 08/06/24	16	70	CB around T-S line	0.00066	0.1	Standard	No Exceedance
G217	UA	E006	Cobalt, total	mg/L	10/14/20 - 08/06/24	16	89	CB around T-S line	0.000635	0.006	Standard	No Exceedance
G217	UA	E006	Fluoride, total	mg/L	10/14/20 - 08/06/24	16	15	CI around median	0.296	4.0	Standard	No Exceedance
G217	UA	E006	Lead, total	mg/L	10/14/20 - 08/06/24	16	90	CI around median	0.001	0.0075	Standard	No Exceedance
G217	UA	E006	Lithium, total	mg/L	02/15/23 - 08/06/24	7	29	CI around median	0.0035	0.04	Standard	No Exceedance
G217	UA	E006	Mercury, total	mg/L	10/14/20 - 08/06/24	16	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G217	UA	E006	Molybdenum, total	mg/L	10/14/20 - 08/06/24	16	89	CB around T-S line	0.001	0.1	Standard	No Exceedance
G217	UA	E006	pH (field)	SU	10/14/20 - 08/06/24	16	0	CI around mean	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance

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EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G217	UA	E006	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 08/06/24	7	0	CI around mean	0.248	5	Standard	No Exceedance
G217	UA	E006	Selenium, total	mg/L	10/14/20 - 08/06/24	16	78	Most recent sample	0.001	0.05	Standard	No Exceedance
G217	UA	E006	Sulfate, total	mg/L	10/14/20 - 08/06/24	16	0	CB around linear reg	439	400	Standard	Exceedance
G217	UA	E006	Thallium, total	mg/L	10/14/20 - 08/06/24	16	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G217	UA	E006	Total Dissolved Solids	mg/L	10/14/20 - 08/06/24	16	0	CB around linear reg	1,100	1,200	Standard	No Exceedance
G218	UA	E006	Antimony, total	mg/L	11/24/15 - 07/31/24	24	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G218	UA	E006	Arsenic, total	mg/L	11/24/15 - 07/31/24	24	21	CI around geomean	0.00136	0.0110	Background	No Exceedance
G218	UA	E006	Barium, total	mg/L	11/24/15 - 07/31/24	24	0	CB around linear reg	0.0754	2.0	Standard	No Exceedance
G218	UA	E006	Beryllium, total	mg/L	11/24/15 - 07/31/24	24	97	CI around median	0.001	0.004	Standard	No Exceedance
G218	UA	E006	Boron, total	mg/L	11/24/15 - 07/31/24	31	76	CB around T-S line	0.01	2	Standard	No Exceedance
G218	UA	E006	Cadmium, total	mg/L	11/24/15 - 07/31/24	24	98	CI around median	0.001	0.005	Standard	No Exceedance
G218	UA	E006	Chloride, total	mg/L	11/24/15 - 07/31/24	31	0	CI around median	84	200	Standard	No Exceedance
G218	UA	E006	Chromium, total	mg/L	11/24/15 - 07/31/24	24	72	CB around T-S line	0.00235	0.1	Standard	No Exceedance
G218	UA	E006	Cobalt, total	mg/L	11/24/15 - 07/31/24	24	89	CB around T-S line	0.00154	0.006	Standard	No Exceedance
G218	UA	E006	Fluoride, total	mg/L	11/24/15 - 07/31/24	32	14	CI around mean	0.287	4.0	Standard	No Exceedance
G218	UA	E006	Lead, total	mg/L	11/24/15 - 07/31/24	24	92	CI around median	0.001	0.0075	Standard	No Exceedance
G218	UA	E006	Lithium, total	mg/L	11/24/15 - 07/31/24	17	71	CI around median	0.0047	0.04	Standard	No Exceedance
G218	UA	E006	Mercury, total	mg/L	11/24/15 - 07/31/24	24	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G218	UA	E006	Molybdenum, total	mg/L	11/24/15 - 07/31/24	24	88	CI around median	0.001	0.1	Standard	No Exceedance
G218	UA	E006	pH (field)	SU	11/24/15 - 07/31/24	33	0	CI around mean	6.9/7.0	6.5/9.0	Standard/Standard	No Exceedance
G218	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 07/31/24	17	0	CI around mean	0.598	5	Standard	No Exceedance
G218	UA	E006	Selenium, total	mg/L	11/24/15 - 07/31/24	24	86	CI around median	0.001	0.05	Standard	No Exceedance
G218	UA	E006	Sulfate, total	mg/L	11/24/15 - 07/31/24	31	0	CB around linear reg	354	400	Standard	No Exceedance
G218	UA	E006	Thallium, total	mg/L	11/24/15 - 07/31/24	24	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G218	UA	E006	Total Dissolved Solids	mg/L	11/24/15 - 07/31/24	32	0	CB around linear reg	942	1,200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Notes:

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

HSU = hydrostratigraphic unit:
 DA = Deep Aquifer
 UA = Uppermost Aquifer

mg/L = milligrams per liter

Missing Code (if applicable):
 NR¹ = Select parameters were not analyzed.
 NS¹ = This well has been, or will be, abandoned; therefore, a sample was not collected.
 NS² = Well either needs or was undergoing maintenance, therefore, a sample was not collected.
 NS³ = A sample was not collected because the location was inaccessible.
 NS⁴ = The location could not be found, therefore a sample was not collected.
 NS⁵ = A sample was not collected because of damage to the well.
 NS⁶ = A sample was not collected because of pump issues.
 NS⁷ = A sample was not collected because the well was either dry or was purged dry and did not recover.
 PM¹ = 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

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



- | | | | |
|--|----------------------------|--|-------------------------------|
| | COMPLIANCE MONITORING WELL | | REGULATED UNIT (SUBJECT UNIT) |
| | BACKGROUND MONITORING WELL | | SITE FEATURE |
| | LEACHATE WELL | | LIMITS OF FINAL COVER |
| | CLOSED STAFF GAGE | | PROPERTY BOUNDARY |

0 200 400 Feet

MONITORING WELL LOCATION MAP

GMF GYPSUM STACK POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- TOTAL SULFATE EXCEEDANCE
- TOTAL DISSOLVED SOLIDS EXCEEDANCE
- COMPLIANCE WELL WITHOUT EXCEEDANCE
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- LIMITS OF FINAL COVER
- PROPERTY BOUNDARY

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

FIGURE 2

0 275 550
Feet

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF GYPSUM STACK POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- TOTAL ARSENIC EXCEEDANCE
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- LIMITS OF FINAL COVER
- PROPERTY BOUNDARY

GWPS EXCEEDANCE MAP

DEEP AQUIFER

QUARTER 4, 2023 AND QUARTERS 1-3, 2024

FIGURE 3

0 275 550
Feet

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF GYPSUM STACK POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- COMPLIANCE MONITORING WELL

BACKGROUND MONITORING WELL

MONITORING WELL

PORE WATER WELL

CCR SOURCEWATER SAMPLE

STAFF GAGE, CCR UNIT

STAFF GAGE, RIVER
- LEACHATE WELL

GROUNDWATER ELEVATION CONTOUR
(2-FT CONTOUR INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION
CONTOUR

GROUNDWATER FLOW DIRECTION

REGULATED UNIT (SUBJECT UNIT)

SITE FEATURE

PROPERTY BOUNDARY

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

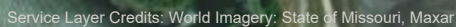
POTENTIOMETRIC SURFACE MAP
JANUARY 12, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF GYPSUM STACK POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

FIGURE 4

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





-
- A number line starting at 0 and ending at 1000. There are tick marks at 325 and 650. The segment from 0 to 325 is labeled '325' and the segment from 325 to 650 is labeled '650'. The unit is 'Feet'.

**2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF GYPSUM STACK POND**

COFFEEN POWER PLANT
COFFEEN, ILLINOIS

8 (NAVD88)

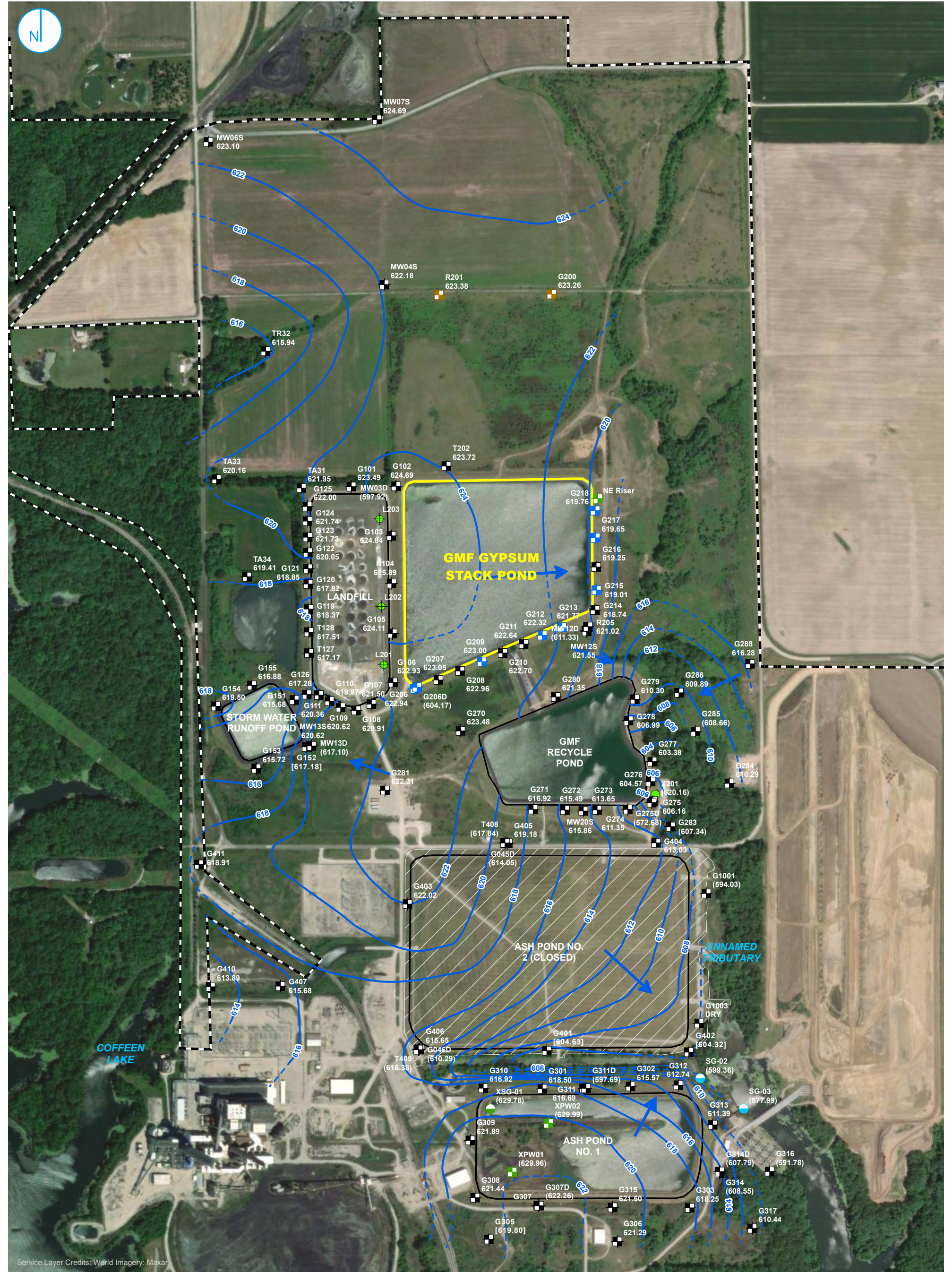
RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



FIGURE 5



FIGURE 6



COMPLIANCE MONITORING WELL

BACKGROUND MONITORING WELL

SOURCE SAMPLE LOCATION

MONITORING WELL

PORE WATER WELL

CCR SOURCE WATER SAMPLE

STAFF GAGE, RIVER

STAFF GAGE, CCR UNIT

LEACHATE WELL

GROUNDWATER ELEVATION CONTOUR
(2-FT CONTOUR INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION
CONTOUR

GROUNDWATER FLOW DIRECTION

REGULATED UNIT (SUBJECT UNIT)

SITE FEATURE

PROPERTY BOUNDARY

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).

0325650

Feet

POTENTIOMETRIC SURFACE MAP
APRIL 29, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF GYPSUM STACK POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

FIGURE 7

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- MONITORING WELL
- PORE WATER WELL
- LEACHATE WELL
- CCR SOURCE WATER SAMPLE
- STAFF GAGE, RIVER
- STAFF GAGE, CCR UNIT

 GROUNDWATER ELEVATION CONTOUR
(2-FT CONTOUR INTERVAL, NAVD88) INFERRED GROUNDWATER ELEVATION
CONTOUR GROUNDWATER FLOW DIRECTION REGULATED UNIT (SUBJECT UNIT) SITE FEATURE LIMITS OF FINAL COVER PROPERTY BOUNDARY

NOTES:

1. ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.

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

0325650

Feet

POTENTIOMETRIC SURFACE MAP
MAY 29, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF GYPSUM STACK POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

FIGURE 8

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- MONITORING WELL
- PORE WATER WELL
- LEACHATE WELL
- CCR SOURCE WATER SAMPLE
- STAFF GAGE, RIVER
- STAFF GAGE, CCR UNIT

 GROUNDWATER ELEVATION CONTOUR
(2-FT CONTOUR INTERVAL, NAVD88) INFERRED GROUNDWATER ELEVATION CONTOUR GROUNDWATER FLOW DIRECTION REGULATED UNIT (SUBJECT UNIT) SITE FEATURE LIMITS OF FINAL COVER PROPERTY BOUNDARY

NOTES:

1. ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.

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

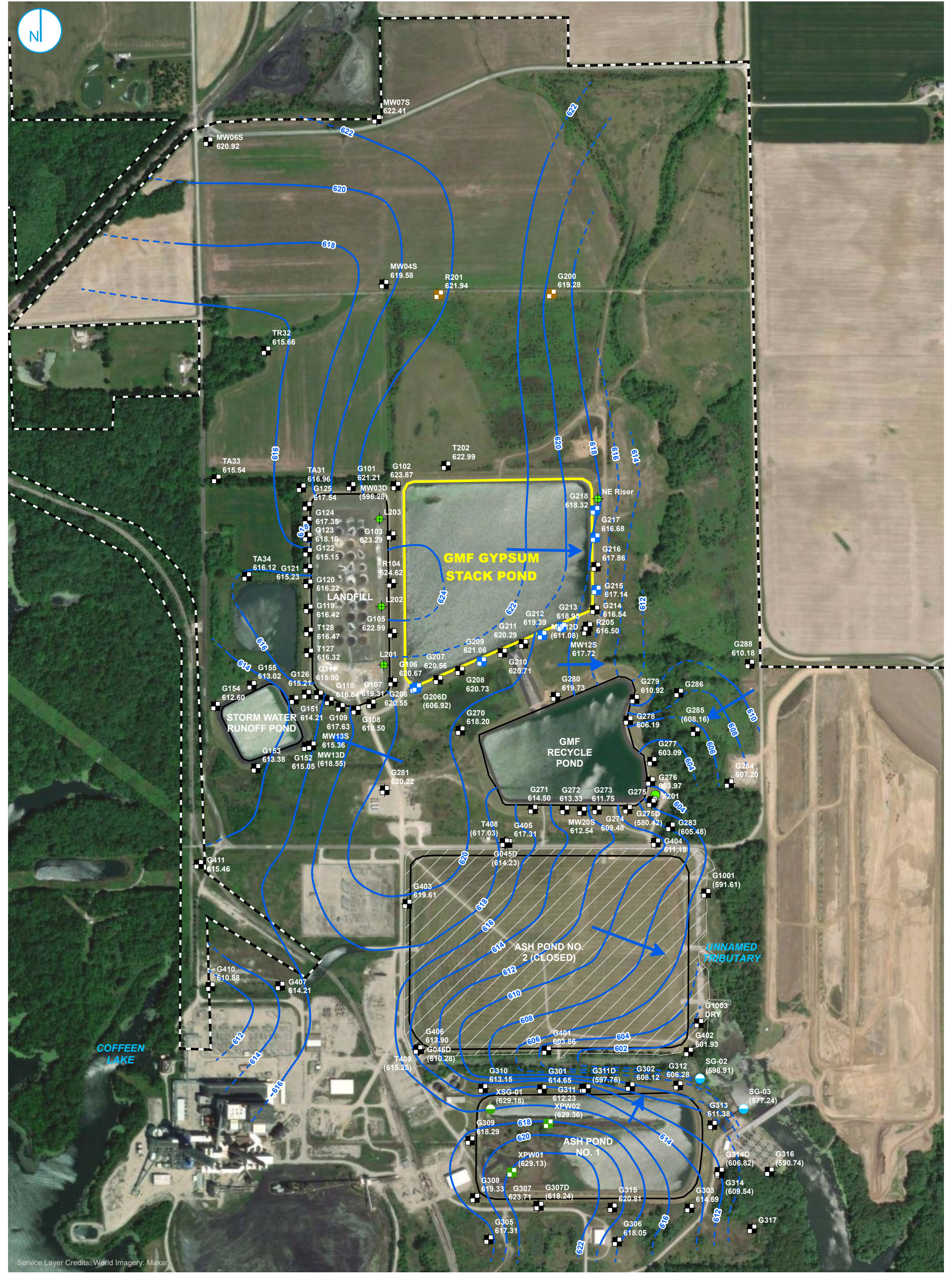
POTENTIOMETRIC SURFACE MAP
JUNE 29, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF GYPSUM STACK POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

FIGURE 9

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- MONITORING WELL
- PORE WATER WELL
- LEACHATE WELL
- CCR SOURCE WATER SAMPLE
- STAFF GAGE, RIVER
- STAFF GAGE, CCR UNIT

- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- LIMITS OF FINAL COVER
- PROPERTY BOUNDARY

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

POTENTIOMETRIC SURFACE MAP
JULY 29 AND 30, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF GYPSUM STACK POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

FIGURE 10

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- MONITORING WELL
- PORE WATER WELL
- LEACHATE WELL
- CCR SOURCE WATER SAMPLE
- STAFF GAGE, RIVER
- STAFF GAGE, CCR UNIT

 GROUNDWATER ELEVATION CONTOUR
(2-FT CONTOUR INTERVAL, NAVD88) INFERRED GROUNDWATER ELEVATION CONTOUR GROUNDWATER FLOW DIRECTION REGULATED UNIT (SUBJECT UNIT) SITE FEATURE LIMITS OF FINAL COVER PROPERTY BOUNDARY

0325650

Feet

NOTES:

1. ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.

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

POTENTIOMETRIC SURFACE MAP

AUGUST 28, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT

GMF GYPSUM STACK POND

COFFEEN POWER PLANT
COFFEEN, ILLINOIS

FIGURE 11

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- COMPLIANCE MONITORING WELL

BACKGROUND MONITORING WELL

MONITORING WELL

PORE WATER WELL

LEACHATE WELL

CCR SOURCE WATER SAMPLE

STAFF GAGE, RIVER

STAFF GAGE, CCR UNIT
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

REGULATED UNIT (SUBJECT UNIT)

SITE FEATURE

LIMITS OF FINAL COVER

PROPERTY BOUNDARY

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

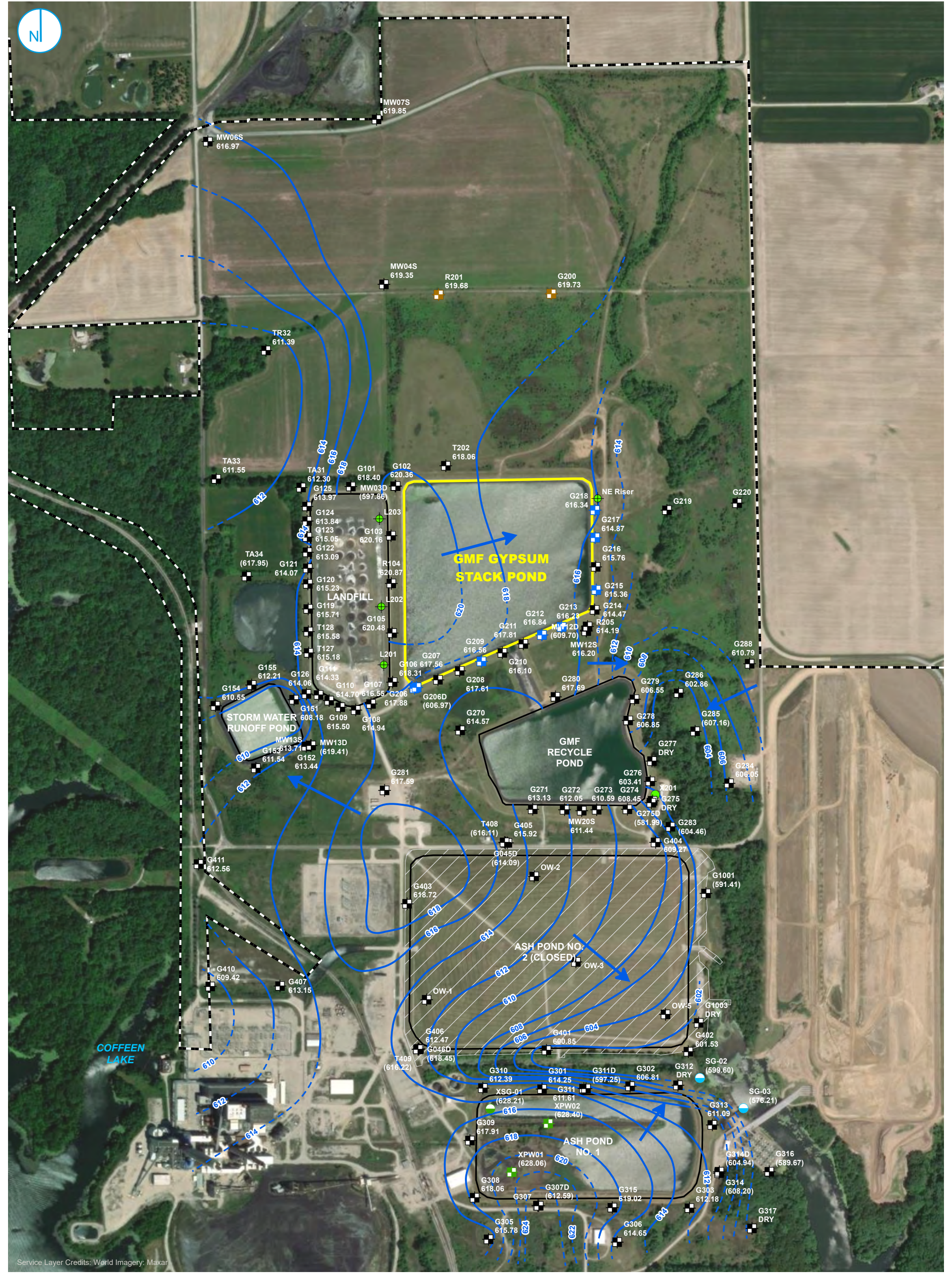
POTENTIOMETRIC SURFACE MAP
SEPTEMBER 28, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF GYPSUM STACK POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

FIGURE 12

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- COMPLIANCE MONITORING WELL

BACKGROUND MONITORING WELL

MONITORING WELL

PORE WATER WELL

LEACHATE WELL

STAFF GAGE, RIVER

STAFF GAGE, CCR UNIT

CCR SOURCE WATER SAMPLE
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

REGULATED UNIT (SUBJECT UNIT)

SITE FEATURE

LIMITS OF FINAL COVER

PROPERTY BOUNDARY

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

POTENTIOMETRIC SURFACE MAP
OCTOBER 28 AND 29, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF GYPSUM STACK POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

FIGURE 13

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- COMPLIANCE MONITORING WELL

BACKGROUND MONITORING WELL

MONITORING WELL

PORE WATER WELL

LEACHATE WELL

CCR SOURCE WATER SAMPLE

STAFF GAGE, RIVER

STAFF GAGE, CCR UNIT
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

REGULATED UNIT (SUBJECT UNIT)

SITE FEATURE

LIMITS OF FINAL COVER

PROPERTY BOUNDARY

POTENTIOMETRIC SURFACE MAP
NOVEMBER 19, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF GYPSUM STACK POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

FIGURE 14

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



0 325 650
Feet

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



- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- MONITORING WELL
- PORE WATER WELL
- LEACHATE WELL
- CCR SOURCE WATER SAMPLE
- STAFF GAGE, RIVER
- STAFF GAGE, CCR UNIT

- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- LIMITS OF FINAL COVER
- PROPERTY BOUNDARY

POTENTIOMETRIC SURFACE MAP
DECEMBER 11-13, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF GYPSUM STACK POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

FIGURE 15

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



0 325 650
Feet

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

ATTACHMENTS

ATTACHMENT A
GROUNDWATER ELEVATION DATA

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

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G200	Background	UA	01/12/2024	6.55	619.15
G200	Background	UA	02/12/2024	5.71	620.00
G200	Background	UA	03/29/2024	3.01	622.69
G200	Background	UA	04/29/2024	2.45	623.26
G200	Background	UA	05/29/2024	3.70	622.23
G200	Background	UA	06/29/2024	5.58	620.36
G200	Background	UA	07/29/2024	6.43	619.28
G200	Background	UA	08/28/2024	DM ⁷	
G200	Background	UA	09/28/2024	DM ⁷	
G200	Background	UA	10/28/2024	6.22	619.73
G200	Background	UA	11/19/2024	DM ⁷	
G200	Background	UA	12/12/2024	4.62	621.33
G206	Compliance	UA	01/12/2024	11.42	621.30
G206	Compliance	UA	02/12/2024	10.90	621.83
G206	Compliance	UA	03/29/2024	10.41	622.31
G206	Compliance	UA	04/29/2024	9.79	622.94
G206	Compliance	UA	05/29/2024	9.98	622.91
G206	Compliance	UA	06/29/2024	12.73	620.16
G206	Compliance	UA	07/29/2024	12.18	620.55
G206	Compliance	UA	08/28/2024	13.53	619.35
G206	Compliance	UA	09/28/2024	13.68	619.20
G206	Compliance	UA	10/28/2024	15.01	617.88
G206	Compliance	UA	11/19/2024	11.02	621.86
G206	Compliance	UA	12/11/2024	12.40	620.49
G206D	Compliance	DA	01/12/2024	28.74	605.10
G206D	Compliance	DA	02/12/2024	29.33	604.52
G206D	Compliance	DA	03/29/2024	32.98	600.86
G206D	Compliance	DA	04/29/2024	29.68	604.17
G206D	Compliance	DA	05/29/2024	28.72	605.06
G206D	Compliance	DA	06/29/2024	27.49	606.30
G206D	Compliance	DA	07/29/2024	26.93	606.92
G206D	Compliance	DA	08/28/2024	27.13	606.65
G206D	Compliance	DA	09/28/2024	26.59	607.19
G206D	Compliance	DA	10/28/2024	26.82	606.97
G206D	Compliance	DA	11/19/2024	26.91	606.88
G206D	Compliance	DA	12/11/2024	26.80	606.99
G209	Compliance	UA	01/12/2024	10.95	621.72
G209	Compliance	UA	02/12/2024	10.36	622.32
G209	Compliance	UA	03/29/2024	9.99	622.68
G209	Compliance	UA	04/29/2024	9.68	623.00
G209	Compliance	UA	05/29/2024	10.38	622.63
G209	Compliance	UA	06/29/2024	12.72	620.29
G209	Compliance	UA	07/29/2024	11.62	621.06
G209	Compliance	UA	08/28/2024	DM ⁷	
G209	Compliance	UA	09/28/2024	DM ⁷	
G209	Compliance	UA	10/28/2024	16.46	616.56

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

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G209	Compliance	UA	11/19/2024	DM ⁷	
G209	Compliance	UA	12/13/2024	[11.72]	[621.30]
G212	Compliance	UA	01/12/2024	14.29	618.47
G212	Compliance	UA	02/12/2024	12.67	620.10
G212	Compliance	UA	03/29/2024	11.01	621.75
G212	Compliance	UA	04/29/2024	10.45	622.32
G212	Compliance	UA	05/29/2024	11.85	621.19
G212	Compliance	UA	06/29/2024	14.16	618.88
G212	Compliance	UA	07/29/2024	13.38	619.39
G212	Compliance	UA	08/28/2024	DM ⁷	
G212	Compliance	UA	09/28/2024	DM ⁷	
G212	Compliance	UA	10/28/2024	16.21	616.84
G212	Compliance	UA	11/19/2024	13.77	619.27
G212	Compliance	UA	12/11/2024	14.65	618.40
G213	Compliance	UA	01/12/2024	15.00	617.79
G213	Compliance	UA	02/12/2024	12.88	619.92
G213	Compliance	UA	03/29/2024	11.77	621.02
G213	Compliance	UA	04/29/2024	11.03	621.77
G213	Compliance	UA	05/29/2024	11.71	621.18
G213	Compliance	UA	06/29/2024	14.44	618.44
G213	Compliance	UA	07/29/2024	13.85	618.95
G213	Compliance	UA	08/28/2024	15.52	617.36
G213	Compliance	UA	09/28/2024	15.87	617.01
G213	Compliance	UA	10/28/2024	16.66	616.23
G213	Compliance	UA	11/19/2024	13.96	618.92
G213	Compliance	UA	12/11/2024	14.82	618.07
G215	Compliance	UA	01/12/2024	16.08	616.87
G215	Compliance	UA	02/12/2024	15.39	617.57
G215	Compliance	UA	03/29/2024	14.27	618.68
G215	Compliance	UA	04/29/2024	13.95	619.01
G215	Compliance	UA	05/29/2024	14.69	618.47
G215	Compliance	UA	06/29/2024	16.60	616.56
G215	Compliance	UA	07/29/2024	15.82	617.14
G215	Compliance	UA	08/28/2024	16.90	616.26
G215	Compliance	UA	09/28/2024	17.15	616.01
G215	Compliance	UA	10/28/2024	17.81	615.36
G215	Compliance	UA	11/19/2024	15.80	617.36
G215	Compliance	UA	12/11/2024	16.40	616.77
G217	Compliance	UA	01/12/2024	16.05	616.98
G217	Compliance	UA	02/12/2024	15.88	617.16
G217	Compliance	UA	03/29/2024	14.04	618.99
G217	Compliance	UA	04/29/2024	13.39	619.65
G217	Compliance	UA	05/29/2024	14.80	618.38
G217	Compliance	UA	06/29/2024	17.18	616.01
G217	Compliance	UA	07/30/2024	16.36	616.68
G217	Compliance	UA	08/28/2024	17.70	615.49

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

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G217	Compliance	UA	09/28/2024	17.51	615.67
G217	Compliance	UA	10/28/2024	18.33	614.87
G217	Compliance	UA	11/19/2024	DM ⁷	
G217	Compliance	UA	12/11/2024	16.85	616.35
G218	Compliance	UA	01/12/2024	15.14	617.76
G218	Compliance	UA	02/12/2024	14.89	618.02
G218	Compliance	UA	03/29/2024	13.91	618.99
G218	Compliance	UA	04/29/2024	13.15	619.76
G218	Compliance	UA	05/29/2024	13.90	619.20
G218	Compliance	UA	06/29/2024	15.58	617.52
G218	Compliance	UA	07/29/2024	14.59	618.32
G218	Compliance	UA	08/28/2024	16.00	617.10
G218	Compliance	UA	09/28/2024	16.03	617.06
G218	Compliance	UA	10/28/2024	16.77	616.34
G218	Compliance	UA	11/19/2024	14.93	618.17
G218	Compliance	UA	12/11/2024	15.53	617.58
R201	Background	UA	01/12/2024	6.47	619.64
R201	Background	UA	02/12/2024	5.16	620.96
R201	Background	UA	03/29/2024	3.43	622.68
R201	Background	UA	04/29/2024	2.74	623.38
R201	Background	UA	05/29/2024	3.41	622.78
R201	Background	UA	06/29/2024	5.45	620.74
R201	Background	UA	07/29/2024	4.18	621.94
R201	Background	UA	08/28/2024	DM ⁷	
R201	Background	UA	09/28/2024	DM ⁷	
R201	Background	UA	10/29/2024	6.52	619.68
R201	Background	UA	11/19/2024	3.46	622.73
R201	Background	UA	12/12/2024	4.32	621.88
NE Riser	Water Level	S	01/12/2024	DM ¹	
NE Riser	Water Level	S	02/13/2024	DM ¹	
NE Riser	Water Level	S	03/29/2024	DM ⁷	
NE Riser	Water Level	S	04/29/2024	DM ⁷	
NE Riser	Water Level	S	05/29/2024	DM ⁷	
NE Riser	Water Level	S	06/29/2024	DM ⁷	
NE Riser	Water Level	S	07/29/2024	DM ⁷	
NE Riser	Water Level	S	08/28/2024	DM ⁷	
NE Riser	Water Level	S	09/28/2024	DM ⁷	
NE Riser	Water Level	S	10/28/2024	15.12	NA
NE Riser	Water Level	S	11/19/2024	DM ⁷	
NE Riser	Water Level	S	12/12/2024	DM ⁷	

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):
DM¹ = Depth to water was not measured.
DM² = Depth to water was not measured because water was above or below the staff gage markings.
DM³ = Depth to water was not measured because the location was inaccessible.
DM⁴ = Depth to water was not measured because water level was below the top of the pump.
DM⁵ = Depth to water was not measured because water level was above the top of casing (artesian well).
DM⁶ = Depth to water was not measured because of damage to the well.
DM⁷ = Depth to water was not measured due to required pressure transducer maintenance.
DM⁸ = 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:
DA = deep aquifer
S = source water
UA = uppermost aquifer

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**ATTACHMENT B
ALTERNATIVE SOURCE DEMONSTRATION IEPA
RESPONSE LETTER**



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

JB PRITZKER, GOVERNOR

JAMES JENNINGS, INTERIM DIRECTOR

217-782-1020

September 5, 2024

Dianna Tickner
Illinois Power Generating Company
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Re: Coffeen Power Plant GMF Gypsum Stack Pond; W1350150004-03
Alternative Source Demonstration (ASD) Submittal

Dear Mrs. Tickner:

The purpose of this correspondence is to notify you that the Illinois Environmental Protection Agency (Illinois EPA) concurs with the Coffeen Power Plant GMF Gypsum Stack Pond Alternative Source Demonstration dated August 6, 2024.

Based on the provided evidence, the Illinois EPA concurs that the arsenic exceedance found in G206D does not come from the Coffeen Power Plant GMF Gypsum Stack Pond. The Illinois EPA also concurs that the likely source of the exceedance come from naturally occurring arsenic in the glacial till of the deep aquifer and is mobilized by groundwater. Therefore, the groundwater monitoring may continue in accordance with Section 845.650(e)(5). The ASD provided must be included in the annual groundwater monitoring report and the corrective action report as required by Section 845.610(e).

If you have any questions, please contact: **Heather Mullenax** Illinois EPA, Bureau of Water, Groundwater Section DPWS #13, P.O. Box 19276, Springfield, Illinois 62794-9276. If you have any questions concerning the investigation described above, please call 217-782-1020.

Sincerely,

A handwritten signature in blue ink, appearing to read "D. LeCrone", with a stylized flourish at the end.

Darin E. LeCrone, P.E.
Manager, Permit Section
Division of Water Pollution Control
Illinois Environmental Protection Agency

cc: Heather Mullenax
Keegan MacDonna
Records Files 06M - W1350150004-03

ATTACHMENT C
COMPARISON TO BACKGROUND

ATTACHMENT C.
COMPARISON TO BACKGROUND - QUARTER 1, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G206	UA	E004	Antimony, total	mg/L	11/18/15 - 02/13/24	22	100	All ND - Last	0.001	0.003
G206	UA	E004	Arsenic, total	mg/L	11/18/15 - 02/13/24	22	69	CI around median	0.001	0.0110
G206	UA	E004	Barium, total	mg/L	11/18/15 - 02/13/24	22	3	CI around mean	0.0477	0.130
G206	UA	E004	Beryllium, total	mg/L	11/18/15 - 02/13/24	22	100	All ND - Last	0.001	0.001
G206	UA	E004	Boron, total	mg/L	11/18/15 - 02/13/24	29	79	CI around median	0.01	0.110
G206	UA	E004	Cadmium, total	mg/L	11/18/15 - 02/13/24	22	100	All ND - Last	0.001	0.001
G206	UA	E004	Chloride, total	mg/L	11/18/15 - 02/13/24	29	0	CB around linear reg	18.8	94.9
G206	UA	E004	Chromium, total	mg/L	11/18/15 - 02/13/24	22	85	CB around T-S line	0.00321	0.00960
G206	UA	E004	Cobalt, total	mg/L	11/18/15 - 02/13/24	22	97	CB around T-S line	0.00189	0.00370
G206	UA	E004	Fluoride, total	mg/L	11/18/15 - 02/13/24	30	5	CI around mean	0.385	0.552
G206	UA	E004	Lead, total	mg/L	11/18/15 - 02/13/24	22	93	CI around median	0.001	0.00590
G206	UA	E004	Lithium, total	mg/L	11/18/15 - 02/13/24	15	100	All ND - Last	0.003	0.02
G206	UA	E004	Mercury, total	mg/L	11/18/15 - 02/13/24	22	100	All ND - Last	0.0002	0.00110
G206	UA	E004	Molybdenum, total	mg/L	11/18/15 - 02/13/24	22	67	CI around median	0.001	0.0440
G206	UA	E004	pH (field)	SU	11/18/15 - 02/13/24	31	0	CI around median	7.1/7.2	6.8/7.4
G206	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 02/13/24	15	0	CI around mean	0.437	1.48
G206	UA	E004	Selenium, total	mg/L	11/18/15 - 02/13/24	22	82	CI around median	0.001	0.00350
G206	UA	E004	Sulfate, total	mg/L	11/18/15 - 02/13/24	29	0	CB around linear reg	125	387
G206	UA	E004	Thallium, total	mg/L	11/18/15 - 02/13/24	22	100	All ND - Last	0.002	0.001
G206	UA	E004	Total Dissolved Solids	mg/L	11/18/15 - 02/13/24	29	0	CB around T-S line	478	975
G206D	DA	E004	Antimony, total	mg/L	03/30/21 - 02/16/24	10	100	All ND - Last	0.001	0.003
G206D	DA	E004	Arsenic, total	mg/L	03/30/21 - 02/16/24	10	0	CB around linear reg	0.0163	0.0110
G206D	DA	E004	Barium, total	mg/L	03/30/21 - 02/16/24	10	0	CI around mean	0.103	0.130
G206D	DA	E004	Beryllium, total	mg/L	03/30/21 - 02/16/24	10	100	All ND - Last	0.001	0.001
G206D	DA	E004	Boron, total	mg/L	03/30/21 - 02/16/24	10	0	CI around mean	0.114	0.110
G206D	DA	E004	Cadmium, total	mg/L	03/30/21 - 02/16/24	10	100	All ND - Last	0.001	0.001
G206D	DA	E004	Chloride, total	mg/L	03/30/21 - 02/16/24	10	0	CB around linear reg	3.89	94.9

ATTACHMENT C.
COMPARISON TO BACKGROUND - QUARTER 1, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G206D	DA	E004	Chromium, total	mg/L	03/30/21 - 02/16/24	10	90	CB around T-S line	-0.00544	0.00960
G206D	DA	E004	Cobalt, total	mg/L	03/30/21 - 02/16/24	10	90	CB around T-S line	-0.000361	0.00370
G206D	DA	E004	Fluoride, total	mg/L	03/30/21 - 02/16/24	10	0	CI around mean	0.682	0.552
G206D	DA	E004	Lead, total	mg/L	03/30/21 - 02/16/24	10	80	CI around median	0.001	0.00590
G206D	DA	E004	Lithium, total	mg/L	03/30/21 - 02/16/24	10	100	All ND - Last	0.003	0.02
G206D	DA	E004	Mercury, total	mg/L	03/30/21 - 02/16/24	10	100	All ND - Last	0.0002	0.00110
G206D	DA	E004	Molybdenum, total	mg/L	03/30/21 - 02/16/24	10	0	CB around linear reg	0.00646	0.0440
G206D	DA	E004	pH (field)	SU	03/30/21 - 02/16/24	10	0	CI around mean	6.9/7.4	6.8/7.4
G206D	DA	E004	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 02/16/24	11	0	CI around mean	0.276	1.48
G206D	DA	E004	Selenium, total	mg/L	03/30/21 - 02/16/24	10	100	All ND - Last	0.001	0.00350
G206D	DA	E004	Sulfate, total	mg/L	03/30/21 - 02/16/24	10	0	CB around linear reg	-100	387
G206D	DA	E004	Thallium, total	mg/L	03/30/21 - 02/16/24	10	100	All ND - Last	0.002	0.001
G206D	DA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/16/24	10	0	CB around linear reg	434	975
G209	UA	E004	Antimony, total	mg/L	11/18/15 - 02/13/24	22	97	CB around T-S line	0.00279	0.003
G209	UA	E004	Arsenic, total	mg/L	11/18/15 - 02/13/24	22	42	CI around geomean	0.00114	0.0110
G209	UA	E004	Barium, total	mg/L	11/18/15 - 02/13/24	22	0	CI around mean	0.0574	0.130
G209	UA	E004	Beryllium, total	mg/L	11/18/15 - 02/13/24	22	97	Most recent sample	0.001	0.001
G209	UA	E004	Boron, total	mg/L	11/18/15 - 02/13/24	29	58	CI around median	0.01	0.110
G209	UA	E004	Cadmium, total	mg/L	11/18/15 - 02/13/24	22	98	Most recent sample	0.001	0.001
G209	UA	E004	Chloride, total	mg/L	11/18/15 - 02/13/24	29	0	CI around median	59	94.9
G209	UA	E004	Chromium, total	mg/L	11/18/15 - 02/13/24	22	71	CB around T-S line	0.00373	0.00960
G209	UA	E004	Cobalt, total	mg/L	11/18/15 - 02/13/24	22	88	CB around T-S line	0.00189	0.00370
G209	UA	E004	Fluoride, total	mg/L	11/18/15 - 02/13/24	30	2	CI around mean	0.406	0.552
G209	UA	E004	Lead, total	mg/L	11/18/15 - 02/13/24	22	87	CI around median	0.001	0.00590
G209	UA	E004	Lithium, total	mg/L	11/18/15 - 02/13/24	15	80	CI around median	0.0058	0.02
G209	UA	E004	Mercury, total	mg/L	11/18/15 - 02/13/24	22	97	Most recent sample	0.0002	0.00110
G209	UA	E004	Molybdenum, total	mg/L	11/18/15 - 02/13/24	22	8	CI around mean	0.00163	0.0440

ATTACHMENT C.
COMPARISON TO BACKGROUND - QUARTER 1, 2024
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COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G209	UA	E004	pH (field)	SU	11/18/15 - 02/13/24	33	0	CI around mean	7.0/7.2	6.8/7.4
G209	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 02/13/24	15	0	CI around mean	0.481	1.48
G209	UA	E004	Selenium, total	mg/L	11/18/15 - 02/13/24	22	62	CI around median	0.001	0.00350
G209	UA	E004	Sulfate, total	mg/L	11/18/15 - 02/13/24	29	0	CI around median	240	387
G209	UA	E004	Thallium, total	mg/L	11/18/15 - 02/13/24	22	94	CB around T-S line	0.001	0.001
G209	UA	E004	Total Dissolved Solids	mg/L	11/18/15 - 02/13/24	29	0	CI around mean	792	975
G212	UA	E004	Antimony, total	mg/L	11/18/15 - 02/14/24	22	100	All ND - Last	0.001	0.003
G212	UA	E004	Arsenic, total	mg/L	11/18/15 - 02/14/24	22	84	CI around median	0.001	0.0110
G212	UA	E004	Barium, total	mg/L	11/18/15 - 02/14/24	22	0	CI around mean	0.0487	0.130
G212	UA	E004	Beryllium, total	mg/L	11/18/15 - 02/14/24	22	97	CI around median	0.001	0.001
G212	UA	E004	Boron, total	mg/L	11/18/15 - 02/14/24	29	83	CI around median	0.01	0.110
G212	UA	E004	Cadmium, total	mg/L	11/18/15 - 02/14/24	22	98	CI around median	0.001	0.001
G212	UA	E004	Chloride, total	mg/L	11/18/15 - 02/14/24	29	0	CB around linear reg	43.6	94.9
G212	UA	E004	Chromium, total	mg/L	11/18/15 - 02/14/24	22	85	CB around T-S line	0.00373	0.00960
G212	UA	E004	Cobalt, total	mg/L	11/18/15 - 02/14/24	22	97	CB around T-S line	0.00189	0.00370
G212	UA	E004	Fluoride, total	mg/L	11/18/15 - 02/14/24	29	12	CI around median	0.32	0.552
G212	UA	E004	Lead, total	mg/L	11/18/15 - 02/14/24	22	84	CI around median	0.001	0.00590
G212	UA	E004	Lithium, total	mg/L	11/18/15 - 02/14/24	15	100	All ND - Last	0.003	0.02
G212	UA	E004	Mercury, total	mg/L	11/18/15 - 02/14/24	22	97	CI around median	0.0002	0.00110
G212	UA	E004	Molybdenum, total	mg/L	11/18/15 - 02/14/24	22	71	CI around median	0.001	0.0440
G212	UA	E004	pH (field)	SU	11/18/15 - 02/14/24	30	0	CI around mean	7.1/7.3	6.8/7.4
G212	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 02/14/24	15	0	CI around mean	0.403	1.48
G212	UA	E004	Selenium, total	mg/L	11/18/15 - 02/14/24	22	15	CB around linear reg	-3.03e-05	0.00350
G212	UA	E004	Sulfate, total	mg/L	11/18/15 - 02/14/24	29	0	CI around mean	53.3	387
G212	UA	E004	Thallium, total	mg/L	11/18/15 - 02/14/24	22	97	CI around median	0.001	0.001
G212	UA	E004	Total Dissolved Solids	mg/L	11/18/15 - 02/14/24	29	0	CI around geomean	381	975
G213	UA	E004	Antimony, total	mg/L	10/13/20 - 02/14/24	14	100	All ND - Last	0.001	0.003

ATTACHMENT C.
COMPARISON TO BACKGROUND - QUARTER 1, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G213	UA	E004	Arsenic, total	mg/L	10/13/20 - 02/14/24	14	70	CI around median	0.001	0.0110
G213	UA	E004	Barium, total	mg/L	10/13/20 - 02/14/24	14	0	CI around mean	0.046	0.130
G213	UA	E004	Beryllium, total	mg/L	10/13/20 - 02/14/24	14	92	Most recent sample	0.001	0.001
G213	UA	E004	Boron, total	mg/L	10/13/20 - 02/14/24	14	89	CI around median	0.01	0.110
G213	UA	E004	Cadmium, total	mg/L	10/13/20 - 02/14/24	14	97	Most recent sample	0.001	0.001
G213	UA	E004	Chloride, total	mg/L	10/13/20 - 02/14/24	14	0	CI around mean	41.8	94.9
G213	UA	E004	Chromium, total	mg/L	10/13/20 - 02/14/24	14	62	CI around median	0.004	0.00960
G213	UA	E004	Cobalt, total	mg/L	10/13/20 - 02/14/24	14	85	CB around T-S line	0.000818	0.00370
G213	UA	E004	Fluoride, total	mg/L	10/13/20 - 02/14/24	14	8	CI around median	0.267	0.552
G213	UA	E004	Lead, total	mg/L	10/13/20 - 02/14/24	14	70	CI around median	0.001	0.00590
G213	UA	E004	Lithium, total	mg/L	02/15/23 - 02/14/24	5	40	CI around geomean	0.00316	0.02
G213	UA	E004	Mercury, total	mg/L	10/13/20 - 02/14/24	14	100	All ND - Last	0.0002	0.00110
G213	UA	E004	Molybdenum, total	mg/L	10/13/20 - 02/14/24	14	88	CB around T-S line	0.001	0.0440
G213	UA	E004	pH (field)	SU	10/13/20 - 02/14/24	14	0	CI around mean	7.0/7.2	6.8/7.4
G213	UA	E004	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 02/14/24	5	0	CI around mean	-0.461	1.48
G213	UA	E004	Selenium, total	mg/L	10/13/20 - 02/14/24	14	27	CI around median	0.001	0.00350
G213	UA	E004	Sulfate, total	mg/L	10/13/20 - 02/14/24	14	0	CB around linear reg	59.8	387
G213	UA	E004	Thallium, total	mg/L	10/13/20 - 02/14/24	14	96	CB around T-S line	0.001	0.001
G213	UA	E004	Total Dissolved Solids	mg/L	10/13/20 - 02/14/24	14	0	CI around mean	373	975
G215	UA	E004	Antimony, total	mg/L	11/24/15 - 02/13/24	22	97	CB around T-S line	0.00223	0.003
G215	UA	E004	Arsenic, total	mg/L	11/24/15 - 02/13/24	22	20	CI around geomean	0.00439	0.0110
G215	UA	E004	Barium, total	mg/L	11/24/15 - 02/13/24	22	0	CB around linear reg	0.00756	0.130
G215	UA	E004	Beryllium, total	mg/L	11/24/15 - 02/13/24	22	100	All ND - Last	0.001	0.001
G215	UA	E004	Boron, total	mg/L	11/24/15 - 02/13/24	30	24	CB around linear reg	0.629	0.110
G215	UA	E004	Cadmium, total	mg/L	11/24/15 - 02/13/24	22	100	All ND - Last	0.001	0.001
G215	UA	E004	Chloride, total	mg/L	11/24/15 - 02/13/24	30	0	CB around T-S line	92.3	94.9
G215	UA	E004	Chromium, total	mg/L	11/24/15 - 02/13/24	22	91	CB around T-S line	0.00373	0.00960

ATTACHMENT C.
COMPARISON TO BACKGROUND - QUARTER 1, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G215	UA	E004	Cobalt, total	mg/L	11/24/15 - 02/13/24	22	91	CB around T-S line	0.00154	0.00370
G215	UA	E004	Fluoride, total	mg/L	11/24/15 - 02/13/24	30	14	CB around linear reg	0.149	0.552
G215	UA	E004	Lead, total	mg/L	11/24/15 - 02/13/24	22	84	CI around median	0.001	0.00590
G215	UA	E004	Lithium, total	mg/L	11/24/15 - 02/13/24	15	80	CI around median	0.0096	0.02
G215	UA	E004	Mercury, total	mg/L	11/24/15 - 02/13/24	22	100	All ND - Last	0.0002	0.00110
G215	UA	E004	Molybdenum, total	mg/L	11/24/15 - 02/13/24	22	88	CI around median	0.001	0.0440
G215	UA	E004	pH (field)	SU	11/24/15 - 02/13/24	32	0	CI around mean	6.9/7.1	6.8/7.4
G215	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 02/13/24	15	0	CI around mean	0.488	1.48
G215	UA	E004	Selenium, total	mg/L	11/24/15 - 02/13/24	22	91	CI around median	0.001	0.00350
G215	UA	E004	Sulfate, total	mg/L	11/24/15 - 02/13/24	30	0	CB around linear reg	506	387
G215	UA	E004	Thallium, total	mg/L	11/24/15 - 02/13/24	22	100	All ND - Last	0.002	0.001
G215	UA	E004	Total Dissolved Solids	mg/L	11/24/15 - 02/13/24	30	0	CB around linear reg	1,220	975
G217	UA	E004	Antimony, total	mg/L	10/14/20 - 02/13/24	14	100	All ND - Last	0.001	0.003
G217	UA	E004	Arsenic, total	mg/L	10/14/20 - 02/13/24	14	84	CI around median	0.001	0.0110
G217	UA	E004	Barium, total	mg/L	10/14/20 - 02/13/24	14	0	CI around mean	0.0939	0.130
G217	UA	E004	Beryllium, total	mg/L	10/14/20 - 02/13/24	14	100	All ND - Last	0.001	0.001
G217	UA	E004	Boron, total	mg/L	10/14/20 - 02/13/24	14	73	CI around median	0.01	0.110
G217	UA	E004	Cadmium, total	mg/L	10/14/20 - 02/13/24	14	100	All ND - Last	0.001	0.001
G217	UA	E004	Chloride, total	mg/L	10/14/20 - 02/13/24	14	0	CB around linear reg	109	94.9
G217	UA	E004	Chromium, total	mg/L	10/14/20 - 02/13/24	14	72	CB around T-S line	0.00105	0.00960
G217	UA	E004	Cobalt, total	mg/L	10/14/20 - 02/13/24	14	88	CB around T-S line	0.000818	0.00370
G217	UA	E004	Fluoride, total	mg/L	10/14/20 - 02/13/24	14	12	CI around median	0.296	0.552
G217	UA	E004	Lead, total	mg/L	10/14/20 - 02/13/24	14	89	CI around median	0.001	0.00590
G217	UA	E004	Lithium, total	mg/L	02/15/23 - 02/13/24	5	40	CI around median (Last Sample, n<7)	0.0037	0.02
G217	UA	E004	Mercury, total	mg/L	10/14/20 - 02/13/24	14	100	All ND - Last	0.0002	0.00110
G217	UA	E004	Molybdenum, total	mg/L	10/14/20 - 02/13/24	14	88	CB around T-S line	0.001	0.0440
G217	UA	E004	pH (field)	SU	10/14/20 - 02/13/24	14	0	CI around mean	6.8/7.0	6.8/7.4

ATTACHMENT C.
COMPARISON TO BACKGROUND - QUARTER 1, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G217	UA	E004	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 02/13/24	5	0	CI around mean	0.345	1.48
G217	UA	E004	Selenium, total	mg/L	10/14/20 - 02/13/24	14	76	Most recent sample	0.001	0.00350
G217	UA	E004	Sulfate, total	mg/L	10/14/20 - 02/13/24	14	0	CB around linear reg	391	387
G217	UA	E004	Thallium, total	mg/L	10/14/20 - 02/13/24	14	100	All ND - Last	0.002	0.001
G217	UA	E004	Total Dissolved Solids	mg/L	10/14/20 - 02/13/24	14	0	CB around linear reg	982	975
G218	UA	E004	Antimony, total	mg/L	11/24/15 - 02/13/24	22	100	All ND - Last	0.001	0.003
G218	UA	E004	Arsenic, total	mg/L	11/24/15 - 02/13/24	22	22	CI around geomean	0.00132	0.0110
G218	UA	E004	Barium, total	mg/L	11/24/15 - 02/13/24	22	0	CB around linear reg	0.0798	0.130
G218	UA	E004	Beryllium, total	mg/L	11/24/15 - 02/13/24	22	97	CI around median	0.001	0.001
G218	UA	E004	Boron, total	mg/L	11/24/15 - 02/13/24	29	77	CB around T-S line	0.01	0.110
G218	UA	E004	Cadmium, total	mg/L	11/24/15 - 02/13/24	22	98	CI around median	0.001	0.001
G218	UA	E004	Chloride, total	mg/L	11/24/15 - 02/13/24	29	0	CI around median	84	94.9
G218	UA	E004	Chromium, total	mg/L	11/24/15 - 02/13/24	22	76	CB around T-S line	0.00284	0.00960
G218	UA	E004	Cobalt, total	mg/L	11/24/15 - 02/13/24	22	88	CI around median	0.002	0.00370
G218	UA	E004	Fluoride, total	mg/L	11/24/15 - 02/13/24	30	12	CI around mean	0.287	0.552
G218	UA	E004	Lead, total	mg/L	11/24/15 - 02/13/24	22	91	CI around median	0.001	0.00590
G218	UA	E004	Lithium, total	mg/L	11/24/15 - 02/13/24	15	80	CI around median	0.0047	0.02
G218	UA	E004	Mercury, total	mg/L	11/24/15 - 02/13/24	22	100	All ND - Last	0.0002	0.00110
G218	UA	E004	Molybdenum, total	mg/L	11/24/15 - 02/13/24	22	88	CI around median	0.001	0.0440
G218	UA	E004	pH (field)	SU	11/24/15 - 02/13/24	31	0	CI around mean	6.9/7.0	6.8/7.4
G218	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 02/13/24	15	0	CI around mean	0.6	1.48
G218	UA	E004	Selenium, total	mg/L	11/24/15 - 02/13/24	22	85	CI around median	0.001	0.00350
G218	UA	E004	Sulfate, total	mg/L	11/24/15 - 02/13/24	29	0	CB around linear reg	327	387
G218	UA	E004	Thallium, total	mg/L	11/24/15 - 02/13/24	22	100	All ND - Last	0.002	0.001
G218	UA	E004	Total Dissolved Solids	mg/L	11/24/15 - 02/13/24	30	0	CB around linear reg	884	975

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

HSU = hydrostratigraphic unit:

- DA = Deep Aquifer
- 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 C.
COMPARISON TO BACKGROUND - QUARTER 2, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G206	UA	E005	Antimony, total	mg/L	11/18/15 - 04/30/24	23	100	All ND - Last	0.001	0.003
G206	UA	E005	Arsenic, total	mg/L	11/18/15 - 04/30/24	23	67	CI around median	0.001	0.0110
G206	UA	E005	Barium, total	mg/L	11/18/15 - 04/30/24	23	3	CI around mean	0.0483	0.130
G206	UA	E005	Beryllium, total	mg/L	11/18/15 - 04/30/24	23	100	All ND - Last	0.001	0.001
G206	UA	E005	Boron, total	mg/L	11/18/15 - 04/30/24	30	79	CI around median	0.01	0.110
G206	UA	E005	Cadmium, total	mg/L	11/18/15 - 04/30/24	23	100	All ND - Last	0.001	0.001
G206	UA	E005	Chloride, total	mg/L	11/18/15 - 04/30/24	30	0	CB around linear reg	18.9	94.9
G206	UA	E005	Chromium, total	mg/L	11/18/15 - 04/30/24	23	83	CB around T-S line	0.0031	0.00960
G206	UA	E005	Cobalt, total	mg/L	11/18/15 - 04/30/24	23	97	CB around T-S line	0.00168	0.00370
G206	UA	E005	Fluoride, total	mg/L	11/18/15 - 04/30/24	31	5	CI around mean	0.386	0.552
G206	UA	E005	Lead, total	mg/L	11/18/15 - 04/30/24	23	94	CI around median	0.001	0.00590
G206	UA	E005	Lithium, total	mg/L	11/18/15 - 04/30/24	16	100	All ND - Last	0.003	0.02
G206	UA	E005	Mercury, total	mg/L	11/18/15 - 04/30/24	23	100	All ND - Last	0.0002	0.00110
G206	UA	E005	Molybdenum, total	mg/L	11/18/15 - 04/30/24	23	64	CI around median	0.001	0.0440
G206	UA	E005	pH (field)	SU	11/18/15 - 04/30/24	32	0	CI around median	7.1/7.2	6.8/7.4
G206	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 04/30/24	16	0	CI around mean	0.419	1.48
G206	UA	E005	Selenium, total	mg/L	11/18/15 - 04/30/24	23	83	CI around median	0.001	0.00350
G206	UA	E005	Sulfate, total	mg/L	11/18/15 - 04/30/24	30	0	CB around linear reg	129	387
G206	UA	E005	Thallium, total	mg/L	11/18/15 - 04/30/24	23	100	All ND - Last	0.002	0.001
G206	UA	E005	Total Dissolved Solids	mg/L	11/18/15 - 04/30/24	30	0	CB around T-S line	484	975
G206D	DA	E005	Antimony, total	mg/L	03/30/21 - 04/30/24	11	100	All ND - Last	0.001	0.003
G206D	DA	E005	Arsenic, total	mg/L	03/30/21 - 04/30/24	11	0	CI around mean	0.00483	0.0110
G206D	DA	E005	Barium, total	mg/L	03/30/21 - 04/30/24	11	0	CB around linear reg	0.163	0.130
G206D	DA	E005	Beryllium, total	mg/L	03/30/21 - 04/30/24	11	100	All ND - Last	0.001	0.001
G206D	DA	E005	Boron, total	mg/L	03/30/21 - 04/30/24	11	0	CI around mean	0.115	0.110
G206D	DA	E005	Cadmium, total	mg/L	03/30/21 - 04/30/24	11	100	All ND - Last	0.001	0.001
G206D	DA	E005	Chloride, total	mg/L	03/30/21 - 04/30/24	11	0	CB around linear reg	3.88	94.9

ATTACHMENT C.
COMPARISON TO BACKGROUND - QUARTER 2, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G206D	DA	E005	Chromium, total	mg/L	03/30/21 - 04/30/24	11	82	CB around T-S line	-0.00434	0.00960
G206D	DA	E005	Cobalt, total	mg/L	03/30/21 - 04/30/24	11	91	CB around T-S line	-3.9e-05	0.00370
G206D	DA	E005	Fluoride, total	mg/L	03/30/21 - 04/30/24	11	0	CI around mean	0.707	0.552
G206D	DA	E005	Lead, total	mg/L	03/30/21 - 04/30/24	11	82	CI around median	0.001	0.00590
G206D	DA	E005	Lithium, total	mg/L	03/30/21 - 04/30/24	11	91	CB around T-S line	-0.00221	0.02
G206D	DA	E005	Mercury, total	mg/L	03/30/21 - 04/30/24	11	100	All ND - Last	0.0002	0.00110
G206D	DA	E005	Molybdenum, total	mg/L	03/30/21 - 04/30/24	11	0	CB around linear reg	0.00582	0.0440
G206D	DA	E005	pH (field)	SU	03/30/21 - 04/30/24	11	0	CI around mean	7.0/7.4	6.8/7.4
G206D	DA	E005	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 04/30/24	12	0	CI around mean	0.28	1.48
G206D	DA	E005	Selenium, total	mg/L	03/30/21 - 04/30/24	11	100	All ND - Last	0.001	0.00350
G206D	DA	E005	Sulfate, total	mg/L	03/30/21 - 04/30/24	11	0	CB around linear reg	-87.5	387
G206D	DA	E005	Thallium, total	mg/L	03/30/21 - 04/30/24	11	100	All ND - Last	0.002	0.001
G206D	DA	E005	Total Dissolved Solids	mg/L	03/30/21 - 04/30/24	11	0	CB around linear reg	426	975
G209	UA	E005	Antimony, total	mg/L	11/18/15 - 05/01/24	23	97	CB around T-S line	0.00236	0.003
G209	UA	E005	Arsenic, total	mg/L	11/18/15 - 05/01/24	23	41	CI around geomean	0.00114	0.0110
G209	UA	E005	Barium, total	mg/L	11/18/15 - 05/01/24	23	0	CI around mean	0.058	0.130
G209	UA	E005	Beryllium, total	mg/L	11/18/15 - 05/01/24	23	97	Most recent sample	0.001	0.001
G209	UA	E005	Boron, total	mg/L	11/18/15 - 05/01/24	30	58	CI around median	0.01	0.110
G209	UA	E005	Cadmium, total	mg/L	11/18/15 - 05/01/24	23	98	Most recent sample	0.001	0.001
G209	UA	E005	Chloride, total	mg/L	11/18/15 - 05/01/24	30	0	CI around median	59	94.9
G209	UA	E005	Chromium, total	mg/L	11/18/15 - 05/01/24	23	69	CB around T-S line	0.00323	0.00960
G209	UA	E005	Cobalt, total	mg/L	11/18/15 - 05/01/24	23	89	CB around T-S line	0.00168	0.00370
G209	UA	E005	Fluoride, total	mg/L	11/18/15 - 05/01/24	31	2	CI around mean	0.409	0.552
G209	UA	E005	Lead, total	mg/L	11/18/15 - 05/01/24	23	87	CI around median	0.001	0.00590
G209	UA	E005	Lithium, total	mg/L	11/18/15 - 05/01/24	16	75	CI around median	0.0058	0.02
G209	UA	E005	Mercury, total	mg/L	11/18/15 - 05/01/24	23	97	Most recent sample	0.0002	0.00110
G209	UA	E005	Molybdenum, total	mg/L	11/18/15 - 05/01/24	23	8	CB around linear reg	0.00203	0.0440

ATTACHMENT C.
COMPARISON TO BACKGROUND - QUARTER 2, 2024
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COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G209	UA	E005	pH (field)	SU	11/18/15 - 05/01/24	34	0	CI around mean	7.0/7.2	6.8/7.4
G209	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 05/01/24	16	0	CI around mean	0.494	1.48
G209	UA	E005	Selenium, total	mg/L	11/18/15 - 05/01/24	23	63	CI around median	0.001	0.00350
G209	UA	E005	Sulfate, total	mg/L	11/18/15 - 05/01/24	30	0	CB around T-S line	214	387
G209	UA	E005	Thallium, total	mg/L	11/18/15 - 05/01/24	23	94	CB around T-S line	0.001	0.001
G209	UA	E005	Total Dissolved Solids	mg/L	11/18/15 - 05/01/24	30	0	CB around linear reg	814	975
G212	UA	E005	Antimony, total	mg/L	11/18/15 - 05/01/24	23	100	All ND - Last	0.001	0.003
G212	UA	E005	Arsenic, total	mg/L	11/18/15 - 05/01/24	23	85	CI around median	0.001	0.0110
G212	UA	E005	Barium, total	mg/L	11/18/15 - 05/01/24	23	0	CI around mean	0.049	0.130
G212	UA	E005	Beryllium, total	mg/L	11/18/15 - 05/01/24	23	97	CI around median	0.001	0.001
G212	UA	E005	Boron, total	mg/L	11/18/15 - 05/01/24	30	83	CI around median	0.01	0.110
G212	UA	E005	Cadmium, total	mg/L	11/18/15 - 05/01/24	23	98	CI around median	0.001	0.001
G212	UA	E005	Chloride, total	mg/L	11/18/15 - 05/01/24	30	0	CB around linear reg	43.6	94.9
G212	UA	E005	Chromium, total	mg/L	11/18/15 - 05/01/24	23	86	CB around T-S line	0.0032	0.00960
G212	UA	E005	Cobalt, total	mg/L	11/18/15 - 05/01/24	23	97	CB around T-S line	0.00168	0.00370
G212	UA	E005	Fluoride, total	mg/L	11/18/15 - 05/01/24	30	12	CI around median	0.32	0.552
G212	UA	E005	Lead, total	mg/L	11/18/15 - 05/01/24	23	85	CI around median	0.001	0.00590
G212	UA	E005	Lithium, total	mg/L	11/18/15 - 05/01/24	16	100	All ND - Last	0.003	0.02
G212	UA	E005	Mercury, total	mg/L	11/18/15 - 05/01/24	23	97	CI around median	0.0002	0.00110
G212	UA	E005	Molybdenum, total	mg/L	11/18/15 - 05/01/24	23	72	CI around median	0.001	0.0440
G212	UA	E005	pH (field)	SU	11/18/15 - 05/01/24	31	0	CI around mean	7.1/7.3	6.8/7.4
G212	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 05/01/24	16	0	CI around mean	0.44	1.48
G212	UA	E005	Selenium, total	mg/L	11/18/15 - 05/01/24	23	14	CB around linear reg	-5.18e-05	0.00350
G212	UA	E005	Sulfate, total	mg/L	11/18/15 - 05/01/24	30	0	CI around mean	53.5	387
G212	UA	E005	Thallium, total	mg/L	11/18/15 - 05/01/24	23	97	CB around T-S line	0.001	0.001
G212	UA	E005	Total Dissolved Solids	mg/L	11/18/15 - 05/01/24	30	0	CB around linear reg	395	975
G213	UA	E005	Antimony, total	mg/L	10/13/20 - 05/06/24	15	100	All ND - Last	0.001	0.003

ATTACHMENT C.
COMPARISON TO BACKGROUND - QUARTER 2, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G213	UA	E005	Arsenic, total	mg/L	10/13/20 - 05/06/24	15	68	CI around median	0.001	0.0110
G213	UA	E005	Barium, total	mg/L	10/13/20 - 05/06/24	15	0	CI around mean	0.0466	0.130
G213	UA	E005	Beryllium, total	mg/L	10/13/20 - 05/06/24	15	93	Most recent sample	0.001	0.001
G213	UA	E005	Boron, total	mg/L	10/13/20 - 05/06/24	15	90	CB around T-S line	0.01	0.110
G213	UA	E005	Cadmium, total	mg/L	10/13/20 - 05/06/24	15	97	Most recent sample	0.001	0.001
G213	UA	E005	Chloride, total	mg/L	10/13/20 - 05/06/24	15	0	CI around mean	42.1	94.9
G213	UA	E005	Chromium, total	mg/L	10/13/20 - 05/06/24	15	59	CI around median	0.004	0.00960
G213	UA	E005	Cobalt, total	mg/L	10/13/20 - 05/06/24	15	85	CB around T-S line	0.000727	0.00370
G213	UA	E005	Fluoride, total	mg/L	10/13/20 - 05/06/24	15	7	CI around median	0.267	0.552
G213	UA	E005	Lead, total	mg/L	10/13/20 - 05/06/24	15	68	CI around median	0.001	0.00590
G213	UA	E005	Lithium, total	mg/L	02/15/23 - 05/06/24	6	33	CI around median (Last Sample, n<7)	0.0042	0.02
G213	UA	E005	Mercury, total	mg/L	10/13/20 - 05/06/24	15	100	All ND - Last	0.0002	0.00110
G213	UA	E005	Molybdenum, total	mg/L	10/13/20 - 05/06/24	15	82	CB around T-S line	0.001	0.0440
G213	UA	E005	pH (field)	SU	10/13/20 - 05/06/24	15	0	CI around mean	7.0/7.2	6.8/7.4
G213	UA	E005	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 05/06/24	6	0	CI around mean	-0.141	1.48
G213	UA	E005	Selenium, total	mg/L	10/13/20 - 05/06/24	15	26	CI around median	0.001	0.00350
G213	UA	E005	Sulfate, total	mg/L	10/13/20 - 05/06/24	15	0	CB around linear reg	62.5	387
G213	UA	E005	Thallium, total	mg/L	10/13/20 - 05/06/24	15	96	CB around T-S line	0.001	0.001
G213	UA	E005	Total Dissolved Solids	mg/L	10/13/20 - 05/06/24	15	0	CI around mean	375	975
G215	UA	E005	Antimony, total	mg/L	11/24/15 - 04/30/24	23	97	CB around T-S line	0.00215	0.003
G215	UA	E005	Arsenic, total	mg/L	11/24/15 - 04/30/24	23	20	CB around T-S line	-0.0286	0.0110
G215	UA	E005	Barium, total	mg/L	11/24/15 - 04/30/24	23	0	CB around linear reg	0.00672	0.130
G215	UA	E005	Beryllium, total	mg/L	11/24/15 - 04/30/24	23	100	All ND - Last	0.001	0.001
G215	UA	E005	Boron, total	mg/L	11/24/15 - 04/30/24	31	24	CB around linear reg	0.667	0.110
G215	UA	E005	Cadmium, total	mg/L	11/24/15 - 04/30/24	23	100	All ND - Last	0.001	0.001
G215	UA	E005	Chloride, total	mg/L	11/24/15 - 04/30/24	31	0	CB around T-S line	96	94.9
G215	UA	E005	Chromium, total	mg/L	11/24/15 - 04/30/24	23	91	CB around T-S line	0.0032	0.00960

ATTACHMENT C.
COMPARISON TO BACKGROUND - QUARTER 2, 2024
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COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G215	UA	E005	Cobalt, total	mg/L	11/24/15 - 04/30/24	23	91	CB around T-S line	0.00116	0.00370
G215	UA	E005	Fluoride, total	mg/L	11/24/15 - 04/30/24	31	14	CB around T-S line	0.184	0.552
G215	UA	E005	Lead, total	mg/L	11/24/15 - 04/30/24	23	85	CI around median	0.001	0.00590
G215	UA	E005	Lithium, total	mg/L	11/24/15 - 04/30/24	16	75	CI around median	0.0096	0.02
G215	UA	E005	Mercury, total	mg/L	11/24/15 - 04/30/24	23	100	All ND - Last	0.0002	0.00110
G215	UA	E005	Molybdenum, total	mg/L	11/24/15 - 04/30/24	23	88	CI around median	0.001	0.0440
G215	UA	E005	pH (field)	SU	11/24/15 - 04/30/24	33	0	CI around mean	6.9/7.1	6.8/7.4
G215	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 04/30/24	16	0	CI around mean	0.458	1.48
G215	UA	E005	Selenium, total	mg/L	11/24/15 - 04/30/24	23	91	CI around median	0.001	0.00350
G215	UA	E005	Sulfate, total	mg/L	11/24/15 - 04/30/24	31	0	CB around linear reg	519	387
G215	UA	E005	Thallium, total	mg/L	11/24/15 - 04/30/24	23	100	All ND - Last	0.002	0.001
G215	UA	E005	Total Dissolved Solids	mg/L	11/24/15 - 04/30/24	31	0	CB around linear reg	1,240	975
G217	UA	E005	Antimony, total	mg/L	10/14/20 - 05/02/24	15	100	All ND - Last	0.001	0.003
G217	UA	E005	Arsenic, total	mg/L	10/14/20 - 05/02/24	15	84	CI around median	0.001	0.0110
G217	UA	E005	Barium, total	mg/L	10/14/20 - 05/02/24	15	0	CI around mean	0.0925	0.130
G217	UA	E005	Beryllium, total	mg/L	10/14/20 - 05/02/24	15	100	All ND - Last	0.001	0.001
G217	UA	E005	Boron, total	mg/L	10/14/20 - 05/02/24	15	71	CB around T-S line	0.01	0.110
G217	UA	E005	Cadmium, total	mg/L	10/14/20 - 05/02/24	15	100	All ND - Last	0.001	0.001
G217	UA	E005	Chloride, total	mg/L	10/14/20 - 05/02/24	15	0	CB around linear reg	114	94.9
G217	UA	E005	Chromium, total	mg/L	10/14/20 - 05/02/24	15	69	CB around T-S line	0.000938	0.00960
G217	UA	E005	Cobalt, total	mg/L	10/14/20 - 05/02/24	15	88	CB around T-S line	0.00073	0.00370
G217	UA	E005	Fluoride, total	mg/L	10/14/20 - 05/02/24	15	12	CI around median	0.296	0.552
G217	UA	E005	Lead, total	mg/L	10/14/20 - 05/02/24	15	90	CI around median	0.001	0.00590
G217	UA	E005	Lithium, total	mg/L	02/15/23 - 05/02/24	6	33	CI around median (Last Sample, n<7)	0.0037	0.02
G217	UA	E005	Mercury, total	mg/L	10/14/20 - 05/02/24	15	100	All ND - Last	0.0002	0.00110
G217	UA	E005	Molybdenum, total	mg/L	10/14/20 - 05/02/24	15	88	CB around T-S line	0.001	0.0440
G217	UA	E005	pH (field)	SU	10/14/20 - 05/02/24	15	0	CI around mean	6.8/7.0	6.8/7.4

ATTACHMENT C.
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845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G217	UA	E005	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 05/02/24	6	0	CI around mean	0.314	1.48
G217	UA	E005	Selenium, total	mg/L	10/14/20 - 05/02/24	15	77	Most recent sample	0.001	0.00350
G217	UA	E005	Sulfate, total	mg/L	10/14/20 - 05/02/24	15	0	CB around linear reg	414	387
G217	UA	E005	Thallium, total	mg/L	10/14/20 - 05/02/24	15	100	All ND - Last	0.002	0.001
G217	UA	E005	Total Dissolved Solids	mg/L	10/14/20 - 05/02/24	15	0	CB around linear reg	1,030	975
G218	UA	E005	Antimony, total	mg/L	11/24/15 - 05/02/24	23	100	All ND - Last	0.001	0.003
G218	UA	E005	Arsenic, total	mg/L	11/24/15 - 05/02/24	23	22	CI around geomean	0.00131	0.0110
G218	UA	E005	Barium, total	mg/L	11/24/15 - 05/02/24	23	0	CB around linear reg	0.0764	0.130
G218	UA	E005	Beryllium, total	mg/L	11/24/15 - 05/02/24	23	97	CI around median	0.001	0.001
G218	UA	E005	Boron, total	mg/L	11/24/15 - 05/02/24	30	77	CB around T-S line	0.01	0.110
G218	UA	E005	Cadmium, total	mg/L	11/24/15 - 05/02/24	23	98	CI around median	0.001	0.001
G218	UA	E005	Chloride, total	mg/L	11/24/15 - 05/02/24	30	0	CI around median	84	94.9
G218	UA	E005	Chromium, total	mg/L	11/24/15 - 05/02/24	23	74	CB around T-S line	0.00215	0.00960
G218	UA	E005	Cobalt, total	mg/L	11/24/15 - 05/02/24	23	89	CB around T-S line	0.00168	0.00370
G218	UA	E005	Fluoride, total	mg/L	11/24/15 - 05/02/24	31	12	CI around mean	0.288	0.552
G218	UA	E005	Lead, total	mg/L	11/24/15 - 05/02/24	23	91	CI around median	0.001	0.00590
G218	UA	E005	Lithium, total	mg/L	11/24/15 - 05/02/24	16	75	CI around median	0.0048	0.02
G218	UA	E005	Mercury, total	mg/L	11/24/15 - 05/02/24	23	100	All ND - Last	0.0002	0.00110
G218	UA	E005	Molybdenum, total	mg/L	11/24/15 - 05/02/24	23	88	CI around median	0.001	0.0440
G218	UA	E005	pH (field)	SU	11/24/15 - 05/02/24	32	0	CI around mean	6.9/7.0	6.8/7.4
G218	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 05/02/24	16	0	CI around mean	0.569	1.48
G218	UA	E005	Selenium, total	mg/L	11/24/15 - 05/02/24	23	86	CI around median	0.001	0.00350
G218	UA	E005	Sulfate, total	mg/L	11/24/15 - 05/02/24	30	0	CB around linear reg	341	387
G218	UA	E005	Thallium, total	mg/L	11/24/15 - 05/02/24	23	100	All ND - Last	0.002	0.001
G218	UA	E005	Total Dissolved Solids	mg/L	11/24/15 - 05/02/24	31	0	CB around linear reg	910	975

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GMF GYPSUM STACK POND
COFFEEN, IL

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

HSU = hydrostratigraphic unit:

DA = Deep Aquifer

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 C.
COMPARISON TO BACKGROUND - QUARTER 3, 2024
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COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G206	UA	E006	Antimony, total	mg/L	11/18/15 - 07/30/24	24	100	All ND - Last	0.001	0.003
G206	UA	E006	Arsenic, total	mg/L	11/18/15 - 07/30/24	24	66	CI around median	0.001	0.0110
G206	UA	E006	Barium, total	mg/L	11/18/15 - 07/30/24	24	3	CI around mean	0.0489	0.130
G206	UA	E006	Beryllium, total	mg/L	11/18/15 - 07/30/24	24	100	All ND - Last	0.001	0.001
G206	UA	E006	Boron, total	mg/L	11/18/15 - 07/30/24	31	80	CI around median	0.01	0.110
G206	UA	E006	Cadmium, total	mg/L	11/18/15 - 07/30/24	24	100	All ND - Last	0.001	0.001
G206	UA	E006	Chloride, total	mg/L	11/18/15 - 07/30/24	31	0	CB around linear reg	19	94.9
G206	UA	E006	Chromium, total	mg/L	11/18/15 - 07/30/24	24	81	CB around T-S line	0.00296	0.00960
G206	UA	E006	Cobalt, total	mg/L	11/18/15 - 07/30/24	24	97	CB around T-S line	0.00149	0.00370
G206	UA	E006	Fluoride, total	mg/L	11/18/15 - 07/30/24	32	7	CI around mean	0.379	0.552
G206	UA	E006	Lead, total	mg/L	11/18/15 - 07/30/24	24	94	CI around median	0.001	0.00590
G206	UA	E006	Lithium, total	mg/L	11/18/15 - 07/30/24	17	100	All ND - Last	0.003	0.02
G206	UA	E006	Mercury, total	mg/L	11/18/15 - 07/30/24	24	100	All ND - Last	0.0002	0.00110
G206	UA	E006	Molybdenum, total	mg/L	11/18/15 - 07/30/24	24	65	CI around median	0.001	0.0440
G206	UA	E006	pH (field)	SU	11/18/15 - 07/30/24	33	0	CI around median	7.1/7.2	6.8/7.4
G206	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 07/30/24	17	0	CI around mean	0.434	1.48
G206	UA	E006	Selenium, total	mg/L	11/18/15 - 07/30/24	24	83	CI around median	0.001	0.00350
G206	UA	E006	Sulfate, total	mg/L	11/18/15 - 07/30/24	31	0	CB around linear reg	132	387
G206	UA	E006	Thallium, total	mg/L	11/18/15 - 07/30/24	24	100	All ND - Last	0.002	0.001
G206	UA	E006	Total Dissolved Solids	mg/L	11/18/15 - 07/30/24	31	0	CB around T-S line	483	975
G206D	DA	E006	Antimony, total	mg/L	03/30/21 - 07/30/24	12	100	All ND - Last	0.001	0.003
G206D	DA	E006	Arsenic, total	mg/L	03/30/21 - 07/30/24	12	0	CI around mean	0.00546	0.0110
G206D	DA	E006	Barium, total	mg/L	03/30/21 - 07/30/24	12	0	CB around linear reg	0.172	0.130
G206D	DA	E006	Beryllium, total	mg/L	03/30/21 - 07/30/24	12	100	All ND - Last	0.001	0.001
G206D	DA	E006	Boron, total	mg/L	03/30/21 - 07/30/24	12	0	CI around mean	0.114	0.110
G206D	DA	E006	Cadmium, total	mg/L	03/30/21 - 07/30/24	12	100	All ND - Last	0.001	0.001
G206D	DA	E006	Chloride, total	mg/L	03/30/21 - 07/30/24	12	0	CB around linear reg	3.01	94.9

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G206D	DA	E006	Chromium, total	mg/L	03/30/21 - 07/30/24	12	75	CB around T-S line	-0.00312	0.00960
G206D	DA	E006	Cobalt, total	mg/L	03/30/21 - 07/30/24	12	92	CB around T-S line	0.000401	0.00370
G206D	DA	E006	Fluoride, total	mg/L	03/30/21 - 07/30/24	12	0	CI around mean	0.727	0.552
G206D	DA	E006	Lead, total	mg/L	03/30/21 - 07/30/24	12	83	CI around median	0.001	0.00590
G206D	DA	E006	Lithium, total	mg/L	03/30/21 - 07/30/24	12	92	CB around T-S line	-0.00279	0.02
G206D	DA	E006	Mercury, total	mg/L	03/30/21 - 07/30/24	12	100	All ND - Last	0.0002	0.00110
G206D	DA	E006	Molybdenum, total	mg/L	03/30/21 - 07/30/24	12	0	CB around linear reg	0.00344	0.0440
G206D	DA	E006	pH (field)	SU	03/30/21 - 07/30/24	12	0	CI around mean	7.0/7.3	6.8/7.4
G206D	DA	E006	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 07/30/24	13	0	CI around mean	0.326	1.48
G206D	DA	E006	Selenium, total	mg/L	03/30/21 - 07/30/24	12	100	All ND - Last	0.001	0.00350
G206D	DA	E006	Sulfate, total	mg/L	03/30/21 - 07/30/24	12	0	CB around linear reg	-87.7	387
G206D	DA	E006	Thallium, total	mg/L	03/30/21 - 07/30/24	12	100	All ND - Last	0.002	0.001
G206D	DA	E006	Total Dissolved Solids	mg/L	03/30/21 - 07/30/24	12	0	CB around linear reg	403	975
G209	UA	E006	Antimony, total	mg/L	11/18/15 - 07/30/24	24	97	CB around T-S line	0.00198	0.003
G209	UA	E006	Arsenic, total	mg/L	11/18/15 - 07/30/24	24	40	CI around geomean	0.00114	0.0110
G209	UA	E006	Barium, total	mg/L	11/18/15 - 07/30/24	24	0	CI around mean	0.0586	0.130
G209	UA	E006	Beryllium, total	mg/L	11/18/15 - 07/30/24	24	97	Most recent sample	0.001	0.001
G209	UA	E006	Boron, total	mg/L	11/18/15 - 07/30/24	31	59	CI around median	0.01	0.110
G209	UA	E006	Cadmium, total	mg/L	11/18/15 - 07/30/24	24	98	Most recent sample	0.001	0.001
G209	UA	E006	Chloride, total	mg/L	11/18/15 - 07/30/24	31	0	CB around T-S line	53.5	94.9
G209	UA	E006	Chromium, total	mg/L	11/18/15 - 07/30/24	24	69	CB around T-S line	0.00271	0.00960
G209	UA	E006	Cobalt, total	mg/L	11/18/15 - 07/30/24	24	89	CB around T-S line	0.00149	0.00370
G209	UA	E006	Fluoride, total	mg/L	11/18/15 - 07/30/24	32	4	CI around mean	0.401	0.552
G209	UA	E006	Lead, total	mg/L	11/18/15 - 07/30/24	24	87	CI around median	0.001	0.00590
G209	UA	E006	Lithium, total	mg/L	11/18/15 - 07/30/24	17	71	CI around median	0.0057	0.02
G209	UA	E006	Mercury, total	mg/L	11/18/15 - 07/30/24	24	97	Most recent sample	0.0002	0.00110
G209	UA	E006	Molybdenum, total	mg/L	11/18/15 - 07/30/24	24	8	CB around linear reg	0.00208	0.0440

ATTACHMENT C.
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COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G209	UA	E006	pH (field)	SU	11/18/15 - 07/30/24	35	0	CI around mean	7.0/7.1	6.8/7.4
G209	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 07/30/24	17	0	CI around mean	0.496	1.48
G209	UA	E006	Selenium, total	mg/L	11/18/15 - 07/30/24	24	64	CI around median	0.001	0.00350
G209	UA	E006	Sulfate, total	mg/L	11/18/15 - 07/30/24	31	0	CB around T-S line	217	387
G209	UA	E006	Thallium, total	mg/L	11/18/15 - 07/30/24	24	94	CB around T-S line	0.001	0.001
G209	UA	E006	Total Dissolved Solids	mg/L	11/18/15 - 07/30/24	31	0	CB around linear reg	816	975
G212	UA	E006	Antimony, total	mg/L	11/18/15 - 08/01/24	24	100	All ND - Last	0.001	0.003
G212	UA	E006	Arsenic, total	mg/L	11/18/15 - 08/01/24	24	85	CI around median	0.001	0.0110
G212	UA	E006	Barium, total	mg/L	11/18/15 - 08/01/24	24	0	CI around mean	0.0491	0.130
G212	UA	E006	Beryllium, total	mg/L	11/18/15 - 08/01/24	24	97	CI around median	0.001	0.001
G212	UA	E006	Boron, total	mg/L	11/18/15 - 08/01/24	31	83	CI around median	0.01	0.110
G212	UA	E006	Cadmium, total	mg/L	11/18/15 - 08/01/24	24	98	CI around median	0.001	0.001
G212	UA	E006	Chloride, total	mg/L	11/18/15 - 08/01/24	31	0	CB around linear reg	44.2	94.9
G212	UA	E006	Chromium, total	mg/L	11/18/15 - 08/01/24	24	86	CB around T-S line	0.00272	0.00960
G212	UA	E006	Cobalt, total	mg/L	11/18/15 - 08/01/24	24	97	CB around T-S line	0.00149	0.00370
G212	UA	E006	Fluoride, total	mg/L	11/18/15 - 08/01/24	31	14	CB around linear reg	0.186	0.552
G212	UA	E006	Lead, total	mg/L	11/18/15 - 08/01/24	24	85	CI around median	0.001	0.00590
G212	UA	E006	Lithium, total	mg/L	11/18/15 - 08/01/24	17	100	All ND - Last	0.003	0.02
G212	UA	E006	Mercury, total	mg/L	11/18/15 - 08/01/24	24	97	CI around median	0.0002	0.00110
G212	UA	E006	Molybdenum, total	mg/L	11/18/15 - 08/01/24	24	73	CI around median	0.001	0.0440
G212	UA	E006	pH (field)	SU	11/18/15 - 08/01/24	32	0	CI around mean	7.1/7.3	6.8/7.4
G212	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/18/15 - 08/01/24	17	0	CI around mean	0.459	1.48
G212	UA	E006	Selenium, total	mg/L	11/18/15 - 08/01/24	24	17	CB around T-S line	0.000106	0.00350
G212	UA	E006	Sulfate, total	mg/L	11/18/15 - 08/01/24	31	0	CI around mean	53.7	387
G212	UA	E006	Thallium, total	mg/L	11/18/15 - 08/01/24	24	97	CB around T-S line	0.001	0.001
G212	UA	E006	Total Dissolved Solids	mg/L	11/18/15 - 08/01/24	31	0	CB around T-S line	397	975
G213	UA	E006	Antimony, total	mg/L	10/13/20 - 08/01/24	16	100	All ND - Last	0.001	0.003

ATTACHMENT C.
COMPARISON TO BACKGROUND - QUARTER 3, 2024
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COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G213	UA	E006	Arsenic, total	mg/L	10/13/20 - 08/01/24	16	69	CI around median	0.001	0.0110
G213	UA	E006	Barium, total	mg/L	10/13/20 - 08/01/24	16	0	CI around mean	0.0469	0.130
G213	UA	E006	Beryllium, total	mg/L	10/13/20 - 08/01/24	16	93	Most recent sample	0.001	0.001
G213	UA	E006	Boron, total	mg/L	10/13/20 - 08/01/24	16	90	CB around T-S line	0.01	0.110
G213	UA	E006	Cadmium, total	mg/L	10/13/20 - 08/01/24	16	97	Most recent sample	0.001	0.001
G213	UA	E006	Chloride, total	mg/L	10/13/20 - 08/01/24	16	0	CB around linear reg	46.8	94.9
G213	UA	E006	Chromium, total	mg/L	10/13/20 - 08/01/24	16	61	CI around median	0.004	0.00960
G213	UA	E006	Cobalt, total	mg/L	10/13/20 - 08/01/24	16	86	CB around T-S line	0.000642	0.00370
G213	UA	E006	Fluoride, total	mg/L	10/13/20 - 08/01/24	16	11	CI around mean	0.263	0.552
G213	UA	E006	Lead, total	mg/L	10/13/20 - 08/01/24	16	69	CI around median	0.001	0.00590
G213	UA	E006	Lithium, total	mg/L	02/15/23 - 08/01/24	7	29	CI around median	0.0033	0.02
G213	UA	E006	Mercury, total	mg/L	10/13/20 - 08/01/24	16	100	All ND - Last	0.0002	0.00110
G213	UA	E006	Molybdenum, total	mg/L	10/13/20 - 08/01/24	16	83	CB around T-S line	0.001	0.0440
G213	UA	E006	pH (field)	SU	10/13/20 - 08/01/24	16	0	CI around mean	7.0/7.2	6.8/7.4
G213	UA	E006	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 08/01/24	7	0	CI around mean	-0.135	1.48
G213	UA	E006	Selenium, total	mg/L	10/13/20 - 08/01/24	16	29	CI around median	0.001	0.00350
G213	UA	E006	Sulfate, total	mg/L	10/13/20 - 08/01/24	16	0	CB around linear reg	64.5	387
G213	UA	E006	Thallium, total	mg/L	10/13/20 - 08/01/24	16	96	CB around T-S line	0.001	0.001
G213	UA	E006	Total Dissolved Solids	mg/L	10/13/20 - 08/01/24	16	0	CI around mean	379	975
G215	UA	E006	Antimony, total	mg/L	11/24/15 - 08/06/24	24	97	CB around T-S line	0.00145	0.003
G215	UA	E006	Arsenic, total	mg/L	11/24/15 - 08/06/24	24	19	CB around T-S line	-0.00794	0.0110
G215	UA	E006	Barium, total	mg/L	11/24/15 - 08/06/24	24	0	CB around linear reg	0.00446	0.130
G215	UA	E006	Beryllium, total	mg/L	11/24/15 - 08/06/24	24	100	All ND - Last	0.001	0.001
G215	UA	E006	Boron, total	mg/L	11/24/15 - 08/06/24	32	24	CB around linear reg	0.67	0.110
G215	UA	E006	Cadmium, total	mg/L	11/24/15 - 08/06/24	24	100	All ND - Last	0.001	0.001
G215	UA	E006	Chloride, total	mg/L	11/24/15 - 08/06/24	32	0	CB around T-S line	104	94.9
G215	UA	E006	Chromium, total	mg/L	11/24/15 - 08/06/24	24	92	CB around T-S line	0.00272	0.00960

ATTACHMENT C.
COMPARISON TO BACKGROUND - QUARTER 3, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G215	UA	E006	Cobalt, total	mg/L	11/24/15 - 08/06/24	24	92	CB around T-S line	0.00126	0.00370
G215	UA	E006	Fluoride, total	mg/L	11/24/15 - 08/06/24	32	16	CB around T-S line	0.244	0.552
G215	UA	E006	Lead, total	mg/L	11/24/15 - 08/06/24	24	85	CI around median	0.001	0.00590
G215	UA	E006	Lithium, total	mg/L	11/24/15 - 08/06/24	17	71	CI around median	0.0091	0.02
G215	UA	E006	Mercury, total	mg/L	11/24/15 - 08/06/24	24	100	All ND - Last	0.0002	0.00110
G215	UA	E006	Molybdenum, total	mg/L	11/24/15 - 08/06/24	24	88	CB around T-S line	0.001	0.0440
G215	UA	E006	pH (field)	SU	11/24/15 - 08/06/24	34	0	CI around mean	6.9/7.1	6.8/7.4
G215	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 08/06/24	17	0	CI around mean	0.453	1.48
G215	UA	E006	Selenium, total	mg/L	11/24/15 - 08/06/24	24	92	CI around median	0.001	0.00350
G215	UA	E006	Sulfate, total	mg/L	11/24/15 - 08/06/24	32	0	CB around linear reg	524	387
G215	UA	E006	Thallium, total	mg/L	11/24/15 - 08/06/24	24	100	All ND - Last	0.002	0.001
G215	UA	E006	Total Dissolved Solids	mg/L	11/24/15 - 08/06/24	32	0	CB around linear reg	1,260	975
G217	UA	E006	Antimony, total	mg/L	10/14/20 - 08/06/24	16	100	All ND - Last	0.001	0.003
G217	UA	E006	Arsenic, total	mg/L	10/14/20 - 08/06/24	16	85	CI around median	0.001	0.0110
G217	UA	E006	Barium, total	mg/L	10/14/20 - 08/06/24	16	0	CI around mean	0.0895	0.130
G217	UA	E006	Beryllium, total	mg/L	10/14/20 - 08/06/24	16	100	All ND - Last	0.001	0.001
G217	UA	E006	Boron, total	mg/L	10/14/20 - 08/06/24	16	69	CB around T-S line	0.0149	0.110
G217	UA	E006	Cadmium, total	mg/L	10/14/20 - 08/06/24	16	100	All ND - Last	0.001	0.001
G217	UA	E006	Chloride, total	mg/L	10/14/20 - 08/06/24	16	0	CB around linear reg	122	94.9
G217	UA	E006	Chromium, total	mg/L	10/14/20 - 08/06/24	16	70	CB around T-S line	0.00066	0.00960
G217	UA	E006	Cobalt, total	mg/L	10/14/20 - 08/06/24	16	89	CB around T-S line	0.000635	0.00370
G217	UA	E006	Fluoride, total	mg/L	10/14/20 - 08/06/24	16	15	CI around median	0.296	0.552
G217	UA	E006	Lead, total	mg/L	10/14/20 - 08/06/24	16	90	CI around median	0.001	0.00590
G217	UA	E006	Lithium, total	mg/L	02/15/23 - 08/06/24	7	29	CI around median	0.0035	0.02
G217	UA	E006	Mercury, total	mg/L	10/14/20 - 08/06/24	16	100	All ND - Last	0.0002	0.00110
G217	UA	E006	Molybdenum, total	mg/L	10/14/20 - 08/06/24	16	89	CB around T-S line	0.001	0.0440
G217	UA	E006	pH (field)	SU	10/14/20 - 08/06/24	16	0	CI around mean	6.8/7.0	6.8/7.4

ATTACHMENT C.
COMPARISON TO BACKGROUND - QUARTER 3, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF GYPSUM STACK POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G217	UA	E006	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 08/06/24	7	0	CI around mean	0.248	1.48
G217	UA	E006	Selenium, total	mg/L	10/14/20 - 08/06/24	16	78	Most recent sample	0.001	0.00350
G217	UA	E006	Sulfate, total	mg/L	10/14/20 - 08/06/24	16	0	CB around linear reg	439	387
G217	UA	E006	Thallium, total	mg/L	10/14/20 - 08/06/24	16	100	All ND - Last	0.002	0.001
G217	UA	E006	Total Dissolved Solids	mg/L	10/14/20 - 08/06/24	16	0	CB around linear reg	1,100	975
G218	UA	E006	Antimony, total	mg/L	11/24/15 - 07/31/24	24	100	All ND - Last	0.001	0.003
G218	UA	E006	Arsenic, total	mg/L	11/24/15 - 07/31/24	24	21	CI around geomean	0.00136	0.0110
G218	UA	E006	Barium, total	mg/L	11/24/15 - 07/31/24	24	0	CB around linear reg	0.0754	0.130
G218	UA	E006	Beryllium, total	mg/L	11/24/15 - 07/31/24	24	97	CI around median	0.001	0.001
G218	UA	E006	Boron, total	mg/L	11/24/15 - 07/31/24	31	76	CB around T-S line	0.01	0.110
G218	UA	E006	Cadmium, total	mg/L	11/24/15 - 07/31/24	24	98	CI around median	0.001	0.001
G218	UA	E006	Chloride, total	mg/L	11/24/15 - 07/31/24	31	0	CI around median	84	94.9
G218	UA	E006	Chromium, total	mg/L	11/24/15 - 07/31/24	24	72	CB around T-S line	0.00235	0.00960
G218	UA	E006	Cobalt, total	mg/L	11/24/15 - 07/31/24	24	89	CB around T-S line	0.00154	0.00370
G218	UA	E006	Fluoride, total	mg/L	11/24/15 - 07/31/24	32	14	CI around mean	0.287	0.552
G218	UA	E006	Lead, total	mg/L	11/24/15 - 07/31/24	24	92	CI around median	0.001	0.00590
G218	UA	E006	Lithium, total	mg/L	11/24/15 - 07/31/24	17	71	CI around median	0.0047	0.02
G218	UA	E006	Mercury, total	mg/L	11/24/15 - 07/31/24	24	100	All ND - Last	0.0002	0.00110
G218	UA	E006	Molybdenum, total	mg/L	11/24/15 - 07/31/24	24	88	CI around median	0.001	0.0440
G218	UA	E006	pH (field)	SU	11/24/15 - 07/31/24	33	0	CI around mean	6.9/7.0	6.8/7.4
G218	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 07/31/24	17	0	CI around mean	0.598	1.48
G218	UA	E006	Selenium, total	mg/L	11/24/15 - 07/31/24	24	86	CI around median	0.001	0.00350
G218	UA	E006	Sulfate, total	mg/L	11/24/15 - 07/31/24	31	0	CB around linear reg	354	387
G218	UA	E006	Thallium, total	mg/L	11/24/15 - 07/31/24	24	100	All ND - Last	0.002	0.001
G218	UA	E006	Total Dissolved Solids	mg/L	11/24/15 - 07/31/24	32	0	CB around linear reg	942	975

Notes:

Lower Confidence Limit (LCL) or Upper Confidence Limit (UCL) exceeded the statistical background value

HSU = hydrostratigraphic unit:

DA = Deep Aquifer

UA = Uppermost Aquifer

mg/L = milligrams per liter

Missing Code (if applicable):

NR¹ = Select parameters were not analyzed.

NS¹ = This well has been, or will be, abandoned; therefore, a sample was not collected.

NS² = Well either needs or was undergoing maintenance, therefore, a sample was not collected.

NS³ = A sample was not collected because the location was inaccessible.

NS⁴ = The location could not be found, therefore a sample was not collected.

NS⁵ = A sample was not collected because of damage to the well.

NS⁶ = A sample was not collected because of pump issues.

NS⁷ = A sample was not collected because the well was either dry or was purged dry and did not recover.

PM¹ = 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

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