



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 Recycle Pond (IEPA ID: W1350150004-04) 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 Recycle Pond (IEPA ID: W1350150004-04), 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 Recycle Pond; IEPA ID: **W1350150004-04**

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 Recycle 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 III 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 470 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 250 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 Recycle 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		618.15			13.1	
CCR				0		8

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 RECYCLE POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS
IEPA ID NO. W1350150004-04**

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

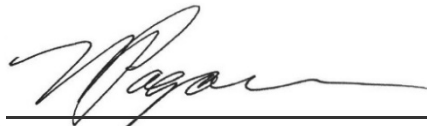
Project name **Coffeen Power Plant GMF Recycle Pond**
Project no. **1940106781-003**
Recipient **Illinois Power Generating Company**
Document type **Annual Groundwater Monitoring and Corrective Action Report**
Version **FINAL**
Date **January 31, 2025**
Prepared by **Kristen L. Theesfeld**
Checked by **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 (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 Lower Confining Unit, Quarters 1-3, 2024
Figure 4	GWPS Exceedance Map Deep Aquifer, Quarters 1-3, 2024
Figure 5	Potentiometric Surface Map, January 12, 2024
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Figure 10	Potentiometric Surface Map, June 29, 2024
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Figure 12	Potentiometric Surface Map, August 28, 2024
Figure 13	Potentiometric Surface Map, September 28, 2024
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Figure 15	Potentiometric Surface Map, November 19, 2024
Figure 16	Potentiometric Surface Map, December 11-13, 2024

ATTACHMENTS

- Attachment A Groundwater Elevation Data
- Attachment B Alternative Source Demonstration IEPA Response 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 RP	Gypsum Management Facility Recycle Pond
GWPS	groundwater protection standard
ID	identification
IEPA	Illinois Environmental Protection Agency
IPCB	Illinois Pollution Control Board
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 Recycle Pond (GMF RP) located at Coffeen Power Plant (CPP) near Coffeen, Illinois. The GMF RP is recognized by coal combustion residuals (CCR) unit identification (ID) No. 104, Illinois Environmental Protection Agency (IEPA) ID No. W1350150004-04, and National Inventory of Dams (NID) No. IL50578.

As required by 35 I.A.C. § 845, an operating permit application for the GMF RP 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 RP 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 RP 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 following quarterly groundwater sampling in 2024 (Ramboll, 2024a; Ramboll, 2024b; Ramboll, 2024c)²:

- Arsenic in G275D
- Chloride in G279
- Sulfate in G273, G277, G279, and G285
- Total Dissolved Solids (TDS) in G277, G279, and G285

An Alternative Source Demonstration (ASD) was submitted on May 9, 2024 (Geosyntec, 2024) for the exceedance of the arsenic GWPS detected at monitoring well G275D during the Quarter 4, 2023 sampling event. The IEPA provided a written response on June 5, 2024 that it did not concur with the ASD (**Attachment B**). The non-concurrence was not appealed.

An ASD was not completed for the other exceedances noted; therefore, an assessment of corrective measures (CMA) was initiated in accordance with 35 I.A.C. § 845.650(d)(3) on

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, 2021 as part of IPGC's operating permit application for the CPP GMF RP. 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.

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 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 RP 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 through 4**).
- 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 5 through 16**).
- 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 RP for calendar year 2024.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

An operating permit application for the GMF RP 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 RP commenced in the second quarter of 2023. After the GMF RP 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 RP 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 RP in 2024. An ASD was submitted on May 9, 2024 for the exceedance of the arsenic GWPS detected at monitoring well G275D during the Quarter 4, 2023 sampling event (Geosyntec, 2024). The IEPA provided a written response on June 5, 2024 that it did not concur with the ASD (**Attachment B**). The non-concurrence was not appealed.

An ASD was not completed for the other exceedances noted; 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 (included as an attachment in 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 5 through 16**.

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. Analytical data received after December 31, 2024 will be reported in the Quarter 4, 2024 Groundwater Monitoring Data and Detected Exceedances Report.

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

The water level was below the top of the dedicated submersible pump at G275 in February and July 2024; therefore, groundwater elevation data were not recorded.

Monitoring well G277 was dry in October 2024; therefore, groundwater elevation data was not recorded and a groundwater sample was not collected.

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 19-21, 2024	April 9, 2024	June 8, 2024	NA
E005	May 1-8, 2024	June 17, 2024	August 16, 2024	NA
E006	July 30 - August 7, 2024	September 13, 2024	November 12, 2024	NA
E007 ⁵	October 29 – November 7, 2024	December 19, 2024	TBD ⁴	TBD

Notes:

ASD: Alternative Source Demonstration

NA: not applicable

TBD: to be determined after January 31, 2025

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

² The following background wells were sampled for each event: G270 and G280

³ The following compliance wells were sampled for each event: G271, G273, G275, G275D, G276, G277, G279, G283, G284, and G285

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

⁵ During the October 2024 sampling event, monitoring well G277 was dry; therefore, groundwater elevation data was not recorded and a groundwater sample was not collected.

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 through 4**⁴:

- Arsenic in G275D
- Chloride in G279
- Sulfate in G273, G277, G279, and G285
- TDS in G277, G279, and G285

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 RP 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 RP. After the GMF RP 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

Geosyntec Consultants, Inc. (Geosyntec), 2024. Alternative Source Demonstration, Coffeen Power Plant GMF Recycle Pond (Unit ID #104), IEPA ID: W1350150004-04, 35 IAC 845.650. May 9, 2024.

<https://www.luminant.com/documents/ccr/il-ccr/Coffeen/2024/2024%2005%2009%20Coffeen%20GMF%20RP%20845.650%20Arsenic%20ASD-W1350150004%E2%80%90004.pdf>

Illinois Administrative Code, Title 35, Subtitle G, Chapter I, Subchapter J, Part 845: Standards for The Disposal Of Coal Combustion Residuals In Surface Impoundments, effective April 21, 2021.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2021. *Groundwater Monitoring Plan*. Coffeen Power Plant, GMF Recycle Pond, Coffeen, Illinois. IPGC. October 25, 2021.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2024a. 35 I.A.C. § 845.610(B)(3)(D) Groundwater Monitoring Data and Detected Exceedances, 2024 Quarter 1, GMF Recycle Pond, Coffeen Power Plant, Coffeen, Illinois. June 8, 2024.

<https://www.luminant.com/documents/ccr/il-ccr/Coffeen/2024/2024-Coffeen%20GMF%20RP%202024%201st%20qtr%2035%20IAC%20845%20GW%20report-Coffeen-GMF%20Recycle%20Pond-W1350150004%E2%80%90004.pdf>

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2024b. 35 I.A.C. § 845.610(B)(3)(D) Groundwater Monitoring Data and Detected Exceedances, 2024 Quarter 2, GMF Recycle Pond, Coffeen Power Plant, Coffeen, Illinois. August 16, 2024.

<https://www.luminant.com/documents/ccr/il-ccr/Coffeen/2024/2024-Coffeen%20GMF%20RP%202024%202nd%20qtr%2035%20IAC%20845%20GW%20report-Coffeen-GMF%20Recycle%20Pond-W1350150004%E2%80%90004.pdf>

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2024c. 35 I.A.C. § 845.610(B)(3)(D) Groundwater Monitoring Data and Detected Exceedances, 2024 Quarter 3, GMF Recycle Pond, Coffeen Power Plant, Coffeen, Illinois. November 12, 2024.

<https://www.luminant.com/documents/ccr/il-ccr/Coffeen/2024/2024-Coffeen%20GMF%20RP%202024%203rd%20qtr%2035%20IAC%20845%20GW%20report-Coffeen-GMF%20Recycle%20Pond-W1350150004%E2%80%90004.pdf>

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2024d. 2023 35 I.A.C. § 845 Annual Groundwater Monitoring and Corrective Action Report, GMF Recycle Pond, Coffeen Power Plant, Coffeen, Illinois, IEPA ID No. W1350150004-04. January 31, 2024.

<https://www.luminant.com/documents/ccr/il-ccr/Coffeen/2023/2023-Coffeen%20GMF%20RP%20Part%20845%20Annual%20Cons%20Rpt-Coffeen-GMF%20Recycle%20Pond-W1350150004%E2%80%90004.pdf>

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2024e. 35 I.A.C. § 845 Corrective Measures Assessment, GMF Recycle Pond, Coffeen Power Plant, Coffeen, Illinois, IEPA ID: W135015004-04. June 12, 2024.

<https://www.luminant.com/documents/ccr/il-ccr/Coffeen/2024/2024%2006%2012%20Coffeen%20GMF%20RP%20CMA%20Nature%20and%20Extent-Coffeen-GMF%20Recycle%20Pond-W1350150004%E2%80%90004.pdf>

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2024f. Semiannual Remedy Selection Progress Report, Gypsum Management Facility Recycle Pond, Coffeen Power Plant. December 12, 2024.

<https://www.luminant.com/documents/ccr/il-ccr/Coffeen/2024/2024-2024%2012%2012%20Coffeen%20GMF%20RP%20Semiann%20Rem%20Sel%20Prog%20Rpt-Coffeen-GMF%20Recycle%20Pond-W1350150004%E2%80%9004.pdf>

TABLES

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G270	Background	E004	02/19/2024	Antimony, total	0.0007 U	mg/L
G270	Background	E004	02/19/2024	Arsenic, total	0.00150 J+	mg/L
G270	Background	E004	02/19/2024	Barium, total	0.0631	mg/L
G270	Background	E004	02/19/2024	Beryllium, total	0.0002 U	mg/L
G270	Background	E004	02/19/2024	Boron, total	0.02 UJ	mg/L
G270	Background	E004	02/19/2024	Cadmium, total	0.0002 U	mg/L
G270	Background	E004	02/19/2024	Calcium, total	58.9	mg/L
G270	Background	E004	02/19/2024	Chloride, total	12.0	mg/L
G270	Background	E004	02/19/2024	Chromium, total	0.00480 J+	mg/L
G270	Background	E004	02/19/2024	Cobalt, total	0.00140 J+	mg/L
G270	Background	E004	02/19/2024	Dissolved Oxygen	2.98	mg/L
G270	Background	E004	02/19/2024	Fluoride, total	0.340	mg/L
G270	Background	E004	02/19/2024	Lead, total	0.00200	mg/L
G270	Background	E004	02/19/2024	Lithium, total	0.00480	mg/L
G270	Background	E004	02/19/2024	Mercury, total	0.00006 U	mg/L
G270	Background	E004	02/19/2024	Molybdenum, total	0.0015 UJ	mg/L
G270	Background	E004	02/19/2024	Oxidation Reduction Potential	147	mV
G270	Background	E004	02/19/2024	pH (field)	7.2	SU
G270	Background	E004	02/19/2024	Radium 226 + Radium 228, total	0.245	pCi/L
G270	Background	E004	02/19/2024	Selenium, total	0.0007 J	mg/L
G270	Background	E004	02/19/2024	Specific Conductance @ 25C (field)	733	micromhos/cm
G270	Background	E004	02/19/2024	Sulfate, total	53.0	mg/L
G270	Background	E004	02/19/2024	Temperature	10.6	degrees C
G270	Background	E004	02/19/2024	Thallium, total	0.001 U	mg/L
G270	Background	E004	02/19/2024	Total Dissolved Solids	412	mg/L
G270	Background	E004	02/19/2024	Turbidity, field	24.0	NTU
G280	Background	E004	02/20/2024	Antimony, total	0.0004 U	mg/L
G280	Background	E004	02/20/2024	Arsenic, total	0.001 UJ	mg/L
G280	Background	E004	02/20/2024	Barium, total	0.0641	mg/L
G280	Background	E004	02/20/2024	Beryllium, total	0.0002 U	mg/L
G280	Background	E004	02/20/2024	Boron, total	0.02 UJ	mg/L
G280	Background	E004	02/20/2024	Cadmium, total	0.0002 U	mg/L
G280	Background	E004	02/20/2024	Calcium, total	80.4	mg/L
G280	Background	E004	02/20/2024	Chloride, total	72.0	mg/L
G280	Background	E004	02/20/2024	Chromium, total	0.00300 J+	mg/L
G280	Background	E004	02/20/2024	Cobalt, total	0.001 UJ	mg/L
G280	Background	E004	02/20/2024	Dissolved Oxygen	3.51	mg/L
G280	Background	E004	02/20/2024	Fluoride, total	0.290	mg/L
G280	Background	E004	02/20/2024	Lead, total	0.00110	mg/L
G280	Background	E004	02/20/2024	Lithium, total	0.00500	mg/L
G280	Background	E004	02/20/2024	Mercury, total	0.00006 U	mg/L
G280	Background	E004	02/20/2024	Molybdenum, total	0.0015 UJ	mg/L
G280	Background	E004	02/20/2024	Oxidation Reduction Potential	136	mV
G280	Background	E004	02/20/2024	pH (field)	7.4	SU
G280	Background	E004	02/20/2024	Radium 226 + Radium 228, total	1.88	pCi/L
G280	Background	E004	02/20/2024	Selenium, total	0.0007 J	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G280	Background	E004	02/20/2024	Specific Conductance @ 25C (field)	883	micromhos/cm
G280	Background	E004	02/20/2024	Sulfate, total	101	mg/L
G280	Background	E004	02/20/2024	Temperature	12.2	degrees C
G280	Background	E004	02/20/2024	Thallium, total	0.001 U	mg/L
G280	Background	E004	02/20/2024	Total Dissolved Solids	530	mg/L
G280	Background	E004	02/20/2024	Turbidity, field	27.0	NTU
G271	Compliance	E004	02/19/2024	Antimony, total	0.00280 J+	mg/L
G271	Compliance	E004	02/19/2024	Arsenic, total	0.001 UJ	mg/L
G271	Compliance	E004	02/19/2024	Barium, total	0.0278	mg/L
G271	Compliance	E004	02/19/2024	Beryllium, total	0.0002 U	mg/L
G271	Compliance	E004	02/19/2024	Boron, total	0.642	mg/L
G271	Compliance	E004	02/19/2024	Cadmium, total	0.0002 U	mg/L
G271	Compliance	E004	02/19/2024	Calcium, total	71.1	mg/L
G271	Compliance	E004	02/19/2024	Chloride, total	46.0	mg/L
G271	Compliance	E004	02/19/2024	Chromium, total	0.0117 J+	mg/L
G271	Compliance	E004	02/19/2024	Cobalt, total	0.001 UJ	mg/L
G271	Compliance	E004	02/19/2024	Dissolved Oxygen	6.01	mg/L
G271	Compliance	E004	02/19/2024	Fluoride, total	0.460	mg/L
G271	Compliance	E004	02/19/2024	Lead, total	0.00160	mg/L
G271	Compliance	E004	02/19/2024	Lithium, total	0.00330	mg/L
G271	Compliance	E004	02/19/2024	Mercury, total	0.00006 U	mg/L
G271	Compliance	E004	02/19/2024	Molybdenum, total	0.0015 UJ	mg/L
G271	Compliance	E004	02/19/2024	Oxidation Reduction Potential	149	mV
G271	Compliance	E004	02/19/2024	pH (field)	7.3	SU
G271	Compliance	E004	02/19/2024	Radium 226 + Radium 228, total	0.994	pCi/L
G271	Compliance	E004	02/19/2024	Selenium, total	0.0009 J	mg/L
G271	Compliance	E004	02/19/2024	Specific Conductance @ 25C (field)	1,030	micromhos/cm
G271	Compliance	E004	02/19/2024	Sulfate, total	199	mg/L
G271	Compliance	E004	02/19/2024	Temperature	13.2	degrees C
G271	Compliance	E004	02/19/2024	Thallium, total	0.001 U	mg/L
G271	Compliance	E004	02/19/2024	Total Dissolved Solids	620	mg/L
G271	Compliance	E004	02/19/2024	Turbidity, field	7.80	NTU
G273	Compliance	E004	02/19/2024	Antimony, total	0.00110 J+	mg/L
G273	Compliance	E004	02/19/2024	Arsenic, total	0.00200 J+	mg/L
G273	Compliance	E004	02/19/2024	Barium, total	0.0592	mg/L
G273	Compliance	E004	02/19/2024	Beryllium, total	0.0002 U	mg/L
G273	Compliance	E004	02/19/2024	Boron, total	0.0925 J+	mg/L
G273	Compliance	E004	02/19/2024	Cadmium, total	0.0002 U	mg/L
G273	Compliance	E004	02/19/2024	Calcium, total	168	mg/L
G273	Compliance	E004	02/19/2024	Chloride, total	67.0	mg/L
G273	Compliance	E004	02/19/2024	Chromium, total	0.00380 J+	mg/L
G273	Compliance	E004	02/19/2024	Cobalt, total	0.001 UJ	mg/L
G273	Compliance	E004	02/19/2024	Dissolved Oxygen	1.76	mg/L
G273	Compliance	E004	02/19/2024	Fluoride, total	0.320	mg/L
G273	Compliance	E004	02/19/2024	Lead, total	0.00120	mg/L
G273	Compliance	E004	02/19/2024	Lithium, total	0.00850	mg/L

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COFFEEN POWER PLANT
GMF RECYCLE POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G273	Compliance	E004	02/19/2024	Mercury, total	0.00006 U	mg/L
G273	Compliance	E004	02/19/2024	Molybdenum, total	0.0015 UJ	mg/L
G273	Compliance	E004	02/19/2024	Oxidation Reduction Potential	151	mV
G273	Compliance	E004	02/19/2024	pH (field)	7.0	SU
G273	Compliance	E004	02/19/2024	Radium 226 + Radium 228, total	0.646	pCi/L
G273	Compliance	E004	02/19/2024	Selenium, total	0.0006 U	mg/L
G273	Compliance	E004	02/19/2024	Specific Conductance @ 25C (field)	1,680	micromhos/cm
G273	Compliance	E004	02/19/2024	Sulfate, total	487	mg/L
G273	Compliance	E004	02/19/2024	Temperature	13.6	degrees C
G273	Compliance	E004	02/19/2024	Thallium, total	0.001 U	mg/L
G273	Compliance	E004	02/19/2024	Total Dissolved Solids	1,140	mg/L
G273	Compliance	E004	02/19/2024	Turbidity, field	9.80	NTU
G275	Compliance	E004	02/19/2024	Antimony, total	0.00210 J+	mg/L
G275	Compliance	E004	02/19/2024	Arsenic, total	0.001 UJ	mg/L
G275	Compliance	E004	02/19/2024	Barium, total	0.0454	mg/L
G275	Compliance	E004	02/19/2024	Beryllium, total	0.0002 U	mg/L
G275	Compliance	E004	02/19/2024	Boron, total	3.36	mg/L
G275	Compliance	E004	02/19/2024	Cadmium, total	0.0002 U	mg/L
G275	Compliance	E004	02/19/2024	Calcium, total	172	mg/L
G275	Compliance	E004	02/19/2024	Chloride, total	16.0	mg/L
G275	Compliance	E004	02/19/2024	Chromium, total	0.00210 J+	mg/L
G275	Compliance	E004	02/19/2024	Cobalt, total	0.001 UJ	mg/L
G275	Compliance	E004	02/19/2024	Dissolved Oxygen	4.06	mg/L
G275	Compliance	E004	02/19/2024	Fluoride, total	0.320	mg/L
G275	Compliance	E004	02/19/2024	Lead, total	0.0006 J	mg/L
G275	Compliance	E004	02/19/2024	Lithium, total	0.00930	mg/L
G275	Compliance	E004	02/19/2024	Mercury, total	0.00006 U	mg/L
G275	Compliance	E004	02/19/2024	Molybdenum, total	0.0006 U	mg/L
G275	Compliance	E004	02/19/2024	Oxidation Reduction Potential	134	mV
G275	Compliance	E004	02/19/2024	pH (field)	7.0	SU
G275	Compliance	E004	02/19/2024	Radium 226 + Radium 228, total	0.0508	pCi/L
G275	Compliance	E004	02/19/2024	Selenium, total	0.0007 J	mg/L
G275	Compliance	E004	02/19/2024	Specific Conductance @ 25C (field)	1,410	micromhos/cm
G275	Compliance	E004	02/19/2024	Sulfate, total	450	mg/L
G275	Compliance	E004	02/19/2024	Temperature	12.9	degrees C
G275	Compliance	E004	02/19/2024	Thallium, total	0.001 U	mg/L
G275	Compliance	E004	02/19/2024	Total Dissolved Solids	1,010 J	mg/L
G275	Compliance	E004	02/19/2024	Turbidity, field	5.70	NTU
G275D	Compliance	E004	02/19/2024	Antimony, total	0.00110 J+	mg/L
G275D	Compliance	E004	02/19/2024	Arsenic, total	0.0174	mg/L
G275D	Compliance	E004	02/19/2024	Barium, total	0.572	mg/L
G275D	Compliance	E004	02/19/2024	Beryllium, total	0.0002 U	mg/L
G275D	Compliance	E004	02/19/2024	Boron, total	0.211	mg/L
G275D	Compliance	E004	02/19/2024	Cadmium, total	0.0002 U	mg/L
G275D	Compliance	E004	02/19/2024	Calcium, total	150	mg/L
G275D	Compliance	E004	02/19/2024	Chloride, total	20.0	mg/L

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FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024
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COFFEEN POWER PLANT
GMF RECYCLE POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G275D	Compliance	E004	02/19/2024	Chromium, total	0.00190 J+	mg/L
G275D	Compliance	E004	02/19/2024	Cobalt, total	0.001 UJ	mg/L
G275D	Compliance	E004	02/19/2024	Dissolved Oxygen	1.91	mg/L
G275D	Compliance	E004	02/19/2024	Fluoride, total	0.480	mg/L
G275D	Compliance	E004	02/19/2024	Lead, total	0.0006 U	mg/L
G275D	Compliance	E004	02/19/2024	Lithium, total	0.00350	mg/L
G275D	Compliance	E004	02/19/2024	Mercury, total	0.00006 U	mg/L
G275D	Compliance	E004	02/19/2024	Molybdenum, total	0.0015 UJ	mg/L
G275D	Compliance	E004	02/19/2024	Oxidation Reduction Potential	130	mV
G275D	Compliance	E004	02/19/2024	pH (field)	7.2	SU
G275D	Compliance	E004	02/19/2024	Radium 226 + Radium 228, total	0.859	pCi/L
G275D	Compliance	E004	02/19/2024	Selenium, total	0.0006 U	mg/L
G275D	Compliance	E004	02/19/2024	Specific Conductance @ 25C (field)	1,500	micromhos/cm
G275D	Compliance	E004	02/19/2024	Sulfate, total	119	mg/L
G275D	Compliance	E004	02/19/2024	Temperature	13.8	degrees C
G275D	Compliance	E004	02/19/2024	Thallium, total	0.001 U	mg/L
G275D	Compliance	E004	02/19/2024	Total Dissolved Solids	465	mg/L
G275D	Compliance	E004	02/19/2024	Turbidity, field	13.0	NTU
G276	Compliance	E004	02/20/2024	Antimony, total	0.001 UJ	mg/L
G276	Compliance	E004	02/20/2024	Arsenic, total	0.00150 J+	mg/L
G276	Compliance	E004	02/20/2024	Barium, total	0.348	mg/L
G276	Compliance	E004	02/20/2024	Beryllium, total	0.0002 U	mg/L
G276	Compliance	E004	02/20/2024	Boron, total	0.0599 J+	mg/L
G276	Compliance	E004	02/20/2024	Cadmium, total	0.0002 U	mg/L
G276	Compliance	E004	02/20/2024	Calcium, total	150	mg/L
G276	Compliance	E004	02/20/2024	Chloride, total	34.0	mg/L
G276	Compliance	E004	02/20/2024	Chromium, total	0.00690 J+	mg/L
G276	Compliance	E004	02/20/2024	Cobalt, total	0.001 UJ	mg/L
G276	Compliance	E004	02/20/2024	Dissolved Oxygen	5.92	mg/L
G276	Compliance	E004	02/20/2024	Fluoride, total	0.360	mg/L
G276	Compliance	E004	02/20/2024	Lead, total	0.00270	mg/L
G276	Compliance	E004	02/20/2024	Lithium, total	0.0128	mg/L
G276	Compliance	E004	02/20/2024	Mercury, total	0.00016 J	mg/L
G276	Compliance	E004	02/20/2024	Molybdenum, total	0.00250 J+	mg/L
G276	Compliance	E004	02/20/2024	Oxidation Reduction Potential	174	mV
G276	Compliance	E004	02/20/2024	pH (field)	6.7	SU
G276	Compliance	E004	02/20/2024	Radium 226 + Radium 228, total	2.5	pCi/L
G276	Compliance	E004	02/20/2024	Selenium, total	0.0006 U	mg/L
G276	Compliance	E004	02/20/2024	Specific Conductance @ 25C (field)	1,350	micromhos/cm
G276	Compliance	E004	02/20/2024	Sulfate, total	253	mg/L
G276	Compliance	E004	02/20/2024	Temperature	12.2	degrees C
G276	Compliance	E004	02/20/2024	Thallium, total	0.001 U	mg/L
G276	Compliance	E004	02/20/2024	Total Dissolved Solids	875 J-	mg/L
G276	Compliance	E004	02/20/2024	Turbidity, field	17.0	NTU
G277	Compliance	E004	02/20/2024	Antimony, total	0.0004 U	mg/L
G277	Compliance	E004	02/20/2024	Arsenic, total	0.001 UJ	mg/L

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COFFEEN POWER PLANT
GMF RECYCLE POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G277	Compliance	E004	02/20/2024	Barium, total	0.0473	mg/L
G277	Compliance	E004	02/20/2024	Beryllium, total	0.0002 U	mg/L
G277	Compliance	E004	02/20/2024	Boron, total	0.116 J+	mg/L
G277	Compliance	E004	02/20/2024	Cadmium, total	0.0002 U	mg/L
G277	Compliance	E004	02/20/2024	Calcium, total	235	mg/L
G277	Compliance	E004	02/20/2024	Chloride, total	117	mg/L
G277	Compliance	E004	02/20/2024	Chromium, total	0.00170 J+	mg/L
G277	Compliance	E004	02/20/2024	Cobalt, total	0.001 UJ	mg/L
G277	Compliance	E004	02/20/2024	Dissolved Oxygen	4.41	mg/L
G277	Compliance	E004	02/20/2024	Fluoride, total	0.270	mg/L
G277	Compliance	E004	02/20/2024	Lead, total	0.0006 U	mg/L
G277	Compliance	E004	02/20/2024	Lithium, total	0.00940	mg/L
G277	Compliance	E004	02/20/2024	Mercury, total	0.00006 U	mg/L
G277	Compliance	E004	02/20/2024	Molybdenum, total	0.0015 UJ	mg/L
G277	Compliance	E004	02/20/2024	Oxidation Reduction Potential	173	mV
G277	Compliance	E004	02/20/2024	pH (field)	6.7	SU
G277	Compliance	E004	02/20/2024	Radium 226 + Radium 228, total	0.149	pCi/L
G277	Compliance	E004	02/20/2024	Selenium, total	0.0006 U	mg/L
G277	Compliance	E004	02/20/2024	Specific Conductance @ 25C (field)	1,910	micromhos/cm
G277	Compliance	E004	02/20/2024	Sulfate, total	611	mg/L
G277	Compliance	E004	02/20/2024	Temperature	12.4	degrees C
G277	Compliance	E004	02/20/2024	Thallium, total	0.001 U	mg/L
G277	Compliance	E004	02/20/2024	Total Dissolved Solids	1,320	mg/L
G277	Compliance	E004	02/20/2024	Turbidity, field	12.0	NTU
G279	Compliance	E004	02/20/2024	Antimony, total	0.0004 U	mg/L
G279	Compliance	E004	02/20/2024	Arsenic, total	0.001 UJ	mg/L
G279	Compliance	E004	02/20/2024	Barium, total	0.0360	mg/L
G279	Compliance	E004	02/20/2024	Beryllium, total	0.0002 U	mg/L
G279	Compliance	E004	02/20/2024	Boron, total	3.56	mg/L
G279	Compliance	E004	02/20/2024	Cadmium, total	0.001 UJ	mg/L
G279	Compliance	E004	02/20/2024	Calcium, total	569	mg/L
G279	Compliance	E004	02/20/2024	Chloride, total	426	mg/L
G279	Compliance	E004	02/20/2024	Chromium, total	0.0015 UJ	mg/L
G279	Compliance	E004	02/20/2024	Cobalt, total	0.001 UJ	mg/L
G279	Compliance	E004	02/20/2024	Dissolved Oxygen	3.65	mg/L
G279	Compliance	E004	02/20/2024	Fluoride, total	0.340	mg/L
G279	Compliance	E004	02/20/2024	Lead, total	0.0006 U	mg/L
G279	Compliance	E004	02/20/2024	Lithium, total	0.0141	mg/L
G279	Compliance	E004	02/20/2024	Mercury, total	0.00006 UJ	mg/L
G279	Compliance	E004	02/20/2024	Molybdenum, total	0.0015 UJ	mg/L
G279	Compliance	E004	02/20/2024	Oxidation Reduction Potential	174	mV
G279	Compliance	E004	02/20/2024	pH (field)	6.8	SU
G279	Compliance	E004	02/20/2024	Radium 226 + Radium 228, total	0.0847	pCi/L
G279	Compliance	E004	02/20/2024	Selenium, total	0.00110	mg/L
G279	Compliance	E004	02/20/2024	Specific Conductance @ 25C (field)	5,990	micromhos/cm
G279	Compliance	E004	02/20/2024	Sulfate, total	2,600	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G279	Compliance	E004	02/20/2024	Temperature	14.3	degrees C
G279	Compliance	E004	02/20/2024	Thallium, total	0.001 U	mg/L
G279	Compliance	E004	02/20/2024	Total Dissolved Solids	4,870	mg/L
G279	Compliance	E004	02/20/2024	Turbidity, field	4.70	NTU
G283	Compliance	E004	02/21/2024	Antimony, total	0.0004 U	mg/L
G283	Compliance	E004	02/21/2024	Arsenic, total	0.001 UJ	mg/L
G283	Compliance	E004	02/21/2024	Barium, total	0.164	mg/L
G283	Compliance	E004	02/21/2024	Beryllium, total	0.0002 U	mg/L
G283	Compliance	E004	02/21/2024	Boron, total	0.0606 J+	mg/L
G283	Compliance	E004	02/21/2024	Cadmium, total	0.0002 U	mg/L
G283	Compliance	E004	02/21/2024	Calcium, total	141	mg/L
G283	Compliance	E004	02/21/2024	Chloride, total	40.0	mg/L
G283	Compliance	E004	02/21/2024	Chromium, total	0.0015 UJ	mg/L
G283	Compliance	E004	02/21/2024	Cobalt, total	0.0001 U	mg/L
G283	Compliance	E004	02/21/2024	Dissolved Oxygen	1.01	mg/L
G283	Compliance	E004	02/21/2024	Fluoride, total	0.330	mg/L
G283	Compliance	E004	02/21/2024	Lead, total	0.0006 U	mg/L
G283	Compliance	E004	02/21/2024	Lithium, total	0.00900	mg/L
G283	Compliance	E004	02/21/2024	Mercury, total	0.00006 U	mg/L
G283	Compliance	E004	02/21/2024	Molybdenum, total	0.00170 J+	mg/L
G283	Compliance	E004	02/21/2024	Oxidation Reduction Potential	156	mV
G283	Compliance	E004	02/21/2024	pH (field)	6.9	SU
G283	Compliance	E004	02/21/2024	Radium 226 + Radium 228, total	1.24	pCi/L
G283	Compliance	E004	02/21/2024	Selenium, total	0.0006 U	mg/L
G283	Compliance	E004	02/21/2024	Specific Conductance @ 25C (field)	1,270	micromhos/cm
G283	Compliance	E004	02/21/2024	Sulfate, total	258	mg/L
G283	Compliance	E004	02/21/2024	Temperature	11.1	degrees C
G283	Compliance	E004	02/21/2024	Thallium, total	0.001 U	mg/L
G283	Compliance	E004	02/21/2024	Total Dissolved Solids	805	mg/L
G283	Compliance	E004	02/21/2024	Turbidity, field	23.0	NTU
G284	Compliance	E004	02/20/2024	Antimony, total	0.001 UJ	mg/L
G284	Compliance	E004	02/20/2024	Arsenic, total	0.001 UJ	mg/L
G284	Compliance	E004	02/20/2024	Barium, total	0.0690	mg/L
G284	Compliance	E004	02/20/2024	Beryllium, total	0.0002 U	mg/L
G284	Compliance	E004	02/20/2024	Boron, total	0.0516 J+	mg/L
G284	Compliance	E004	02/20/2024	Cadmium, total	0.0002 U	mg/L
G284	Compliance	E004	02/20/2024	Calcium, total	72.0	mg/L
G284	Compliance	E004	02/20/2024	Chloride, total	33.0	mg/L
G284	Compliance	E004	02/20/2024	Chromium, total	0.0015 UJ	mg/L
G284	Compliance	E004	02/20/2024	Cobalt, total	0.0001 U	mg/L
G284	Compliance	E004	02/20/2024	Dissolved Oxygen	2.51	mg/L
G284	Compliance	E004	02/20/2024	Fluoride, total	0.510	mg/L
G284	Compliance	E004	02/20/2024	Lead, total	0.0006 U	mg/L
G284	Compliance	E004	02/20/2024	Lithium, total	0.00780	mg/L
G284	Compliance	E004	02/20/2024	Mercury, total	0.00006 U	mg/L
G284	Compliance	E004	02/20/2024	Molybdenum, total	0.0123	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G284	Compliance	E004	02/20/2024	Oxidation Reduction Potential	128	mV
G284	Compliance	E004	02/20/2024	pH (field)	7.1	SU
G284	Compliance	E004	02/20/2024	Radium 226 + Radium 228, total	0.776	pCi/L
G284	Compliance	E004	02/20/2024	Selenium, total	0.0009 J	mg/L
G284	Compliance	E004	02/20/2024	Specific Conductance @ 25C (field)	653	micromhos/cm
G284	Compliance	E004	02/20/2024	Sulfate, total	83.0	mg/L
G284	Compliance	E004	02/20/2024	Temperature	11.7	degrees C
G284	Compliance	E004	02/20/2024	Thallium, total	0.001 U	mg/L
G284	Compliance	E004	02/20/2024	Total Dissolved Solids	500	mg/L
G284	Compliance	E004	02/20/2024	Turbidity, field	2.90	NTU
G285	Compliance	E004	02/20/2024	Antimony, total	0.0004 U	mg/L
G285	Compliance	E004	02/20/2024	Arsenic, total	0.001 UJ	mg/L
G285	Compliance	E004	02/20/2024	Barium, total	0.0315	mg/L
G285	Compliance	E004	02/20/2024	Beryllium, total	0.0002 U	mg/L
G285	Compliance	E004	02/20/2024	Boron, total	0.134 J+	mg/L
G285	Compliance	E004	02/20/2024	Cadmium, total	0.0002 U	mg/L
G285	Compliance	E004	02/20/2024	Calcium, total	203	mg/L
G285	Compliance	E004	02/20/2024	Chloride, total	28.0	mg/L
G285	Compliance	E004	02/20/2024	Chromium, total	0.0015 UJ	mg/L
G285	Compliance	E004	02/20/2024	Cobalt, total	0.001 UJ	mg/L
G285	Compliance	E004	02/20/2024	Dissolved Oxygen	0.530	mg/L
G285	Compliance	E004	02/20/2024	Fluoride, total	0.520	mg/L
G285	Compliance	E004	02/20/2024	Lead, total	0.0006 U	mg/L
G285	Compliance	E004	02/20/2024	Lithium, total	0.00600	mg/L
G285	Compliance	E004	02/20/2024	Mercury, total	0.00006 U	mg/L
G285	Compliance	E004	02/20/2024	Molybdenum, total	0.00330 J+	mg/L
G285	Compliance	E004	02/20/2024	Oxidation Reduction Potential	127	mV
G285	Compliance	E004	02/20/2024	pH (field)	6.7	SU
G285	Compliance	E004	02/20/2024	Radium 226 + Radium 228, total	1.04	pCi/L
G285	Compliance	E004	02/20/2024	Selenium, total	0.0006 U	mg/L
G285	Compliance	E004	02/20/2024	Specific Conductance @ 25C (field)	1,560	micromhos/cm
G285	Compliance	E004	02/20/2024	Sulfate, total	646	mg/L
G285	Compliance	E004	02/20/2024	Temperature	12.4	degrees C
G285	Compliance	E004	02/20/2024	Thallium, total	0.001 U	mg/L
G285	Compliance	E004	02/20/2024	Total Dissolved Solids	1,370	mg/L
G285	Compliance	E004	02/20/2024	Turbidity, field	12.0	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 RECYCLE POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G270	Background	E005	05/08/2024	Antimony, total	0.0009 J	mg/L
G270	Background	E005	05/08/2024	Arsenic, total	0.001 UJ	mg/L
G270	Background	E005	05/08/2024	Barium, total	0.0388	mg/L
G270	Background	E005	05/08/2024	Beryllium, total	0.0002 U	mg/L
G270	Background	E005	05/08/2024	Boron, total	0.02 UJ	mg/L
G270	Background	E005	05/08/2024	Cadmium, total	0.0002 U	mg/L
G270	Background	E005	05/08/2024	Calcium, total	58.6	mg/L
G270	Background	E005	05/08/2024	Chloride, total	12.0	mg/L
G270	Background	E005	05/08/2024	Chromium, total	0.0015 UJ	mg/L
G270	Background	E005	05/08/2024	Cobalt, total	0.0001 J	mg/L
G270	Background	E005	05/08/2024	Dissolved Oxygen	1.83	mg/L
G270	Background	E005	05/08/2024	Fluoride, total	0.360	mg/L
G270	Background	E005	05/08/2024	Lead, total	0.0006 U	mg/L
G270	Background	E005	05/08/2024	Lithium, total	0.0022 J	mg/L
G270	Background	E005	05/08/2024	Mercury, total	0.00006 U	mg/L
G270	Background	E005	05/08/2024	Molybdenum, total	0.0015 UJ	mg/L
G270	Background	E005	05/08/2024	Oxidation Reduction Potential	55.0	mV
G270	Background	E005	05/08/2024	pH (field)	7.1	SU
G270	Background	E005	05/08/2024	Radium 226 + Radium 228, total	0.16	pCi/L
G270	Background	E005	05/08/2024	Selenium, total	0.001 UJ	mg/L
G270	Background	E005	05/08/2024	Specific Conductance @ 25C (field)	688	micromhos/cm
G270	Background	E005	05/08/2024	Sulfate, total	56.0	mg/L
G270	Background	E005	05/08/2024	Temperature	14.0	degrees C
G270	Background	E005	05/08/2024	Thallium, total	0.001 U	mg/L
G270	Background	E005	05/08/2024	Total Dissolved Solids	456	mg/L
G270	Background	E005	05/08/2024	Turbidity, field	1.30	NTU
G280	Background	E005	05/06/2024	Antimony, total	0.0006 J	mg/L
G280	Background	E005	05/06/2024	Arsenic, total	0.0006 J	mg/L
G280	Background	E005	05/06/2024	Barium, total	0.0496	mg/L
G280	Background	E005	05/06/2024	Beryllium, total	0.0002 U	mg/L
G280	Background	E005	05/06/2024	Boron, total	0.0092 U	mg/L
G280	Background	E005	05/06/2024	Cadmium, total	0.0002 U	mg/L
G280	Background	E005	05/06/2024	Calcium, total	80.6	mg/L
G280	Background	E005	05/06/2024	Chloride, total	74.0	mg/L
G280	Background	E005	05/06/2024	Chromium, total	0.00240 J+	mg/L
G280	Background	E005	05/06/2024	Cobalt, total	0.0005 J	mg/L
G280	Background	E005	05/06/2024	Dissolved Oxygen	0.190	mg/L
G280	Background	E005	05/06/2024	Fluoride, total	0.300	mg/L
G280	Background	E005	05/06/2024	Lead, total	0.0007 J	mg/L
G280	Background	E005	05/06/2024	Lithium, total	0.00470	mg/L
G280	Background	E005	05/06/2024	Mercury, total	0.00006 U	mg/L
G280	Background	E005	05/06/2024	Molybdenum, total	0.001 J	mg/L
G280	Background	E005	05/06/2024	Oxidation Reduction Potential	71.0	mV
G280	Background	E005	05/06/2024	pH (field)	7.3	SU
G280	Background	E005	05/06/2024	Radium 226 + Radium 228, total	0.729	pCi/L
G280	Background	E005	05/06/2024	Selenium, total	0.0006 U	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G280	Background	E005	05/06/2024	Specific Conductance @ 25C (field)	834	micromhos/cm
G280	Background	E005	05/06/2024	Sulfate, total	96.0	mg/L
G280	Background	E005	05/06/2024	Temperature	13.7	degrees C
G280	Background	E005	05/06/2024	Thallium, total	0.001 U	mg/L
G280	Background	E005	05/06/2024	Total Dissolved Solids	512	mg/L
G280	Background	E005	05/06/2024	Turbidity, field	19.0	NTU
G271	Compliance	E005	05/01/2024	Antimony, total	0.0007 J	mg/L
G271	Compliance	E005	05/01/2024	Arsenic, total	0.0004 U	mg/L
G271	Compliance	E005	05/01/2024	Barium, total	0.0209	mg/L
G271	Compliance	E005	05/01/2024	Beryllium, total	0.0002 U	mg/L
G271	Compliance	E005	05/01/2024	Boron, total	0.600	mg/L
G271	Compliance	E005	05/01/2024	Cadmium, total	0.0002 U	mg/L
G271	Compliance	E005	05/01/2024	Calcium, total	87.0	mg/L
G271	Compliance	E005	05/01/2024	Chloride, total	62.0	mg/L
G271	Compliance	E005	05/01/2024	Chromium, total	0.00210 J+	mg/L
G271	Compliance	E005	05/01/2024	Cobalt, total	0.0001 U	mg/L
G271	Compliance	E005	05/01/2024	Dissolved Oxygen	1.22	mg/L
G271	Compliance	E005	05/01/2024	Fluoride, total	0.380	mg/L
G271	Compliance	E005	05/01/2024	Lead, total	0.0008 J	mg/L
G271	Compliance	E005	05/01/2024	Lithium, total	0.0027 J	mg/L
G271	Compliance	E005	05/01/2024	Mercury, total	0.00006 U	mg/L
G271	Compliance	E005	05/01/2024	Molybdenum, total	0.0008 J	mg/L
G271	Compliance	E005	05/01/2024	Oxidation Reduction Potential	113	mV
G271	Compliance	E005	05/01/2024	pH (field)	7.1	SU
G271	Compliance	E005	05/01/2024	Radium 226 + Radium 228, total	0.372	pCi/L
G271	Compliance	E005	05/01/2024	Selenium, total	0.00140 J+	mg/L
G271	Compliance	E005	05/01/2024	Specific Conductance @ 25C (field)	1,080	micromhos/cm
G271	Compliance	E005	05/01/2024	Sulfate, total	205	mg/L
G271	Compliance	E005	05/01/2024	Temperature	14.2	degrees C
G271	Compliance	E005	05/01/2024	Thallium, total	0.001 U	mg/L
G271	Compliance	E005	05/01/2024	Total Dissolved Solids	726	mg/L
G271	Compliance	E005	05/01/2024	Turbidity, field	4.30	NTU
G273	Compliance	E005	05/01/2024	Antimony, total	0.0005 J	mg/L
G273	Compliance	E005	05/01/2024	Arsenic, total	0.0006 J	mg/L
G273	Compliance	E005	05/01/2024	Barium, total	0.0322	mg/L
G273	Compliance	E005	05/01/2024	Beryllium, total	0.0002 U	mg/L
G273	Compliance	E005	05/01/2024	Boron, total	0.119	mg/L
G273	Compliance	E005	05/01/2024	Cadmium, total	0.0002 U	mg/L
G273	Compliance	E005	05/01/2024	Calcium, total	179	mg/L
G273	Compliance	E005	05/01/2024	Chloride, total	65.0	mg/L
G273	Compliance	E005	05/01/2024	Chromium, total	0.00150 J+	mg/L
G273	Compliance	E005	05/01/2024	Cobalt, total	0.0002 J	mg/L
G273	Compliance	E005	05/01/2024	Dissolved Oxygen	0.660	mg/L
G273	Compliance	E005	05/01/2024	Fluoride, total	0.300	mg/L
G273	Compliance	E005	05/01/2024	Lead, total	0.0006 U	mg/L
G273	Compliance	E005	05/01/2024	Lithium, total	0.00670	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G273	Compliance	E005	05/01/2024	Mercury, total	0.00006 U	mg/L
G273	Compliance	E005	05/01/2024	Molybdenum, total	0.0009 J	mg/L
G273	Compliance	E005	05/01/2024	Oxidation Reduction Potential	24.0	mV
G273	Compliance	E005	05/01/2024	pH (field)	7.0	SU
G273	Compliance	E005	05/01/2024	Radium 226 + Radium 228, total	0.927	pCi/L
G273	Compliance	E005	05/01/2024	Selenium, total	0.0006 U	mg/L
G273	Compliance	E005	05/01/2024	Specific Conductance @ 25C (field)	1,570	micromhos/cm
G273	Compliance	E005	05/01/2024	Sulfate, total	477	mg/L
G273	Compliance	E005	05/01/2024	Temperature	13.9	degrees C
G273	Compliance	E005	05/01/2024	Thallium, total	0.001 U	mg/L
G273	Compliance	E005	05/01/2024	Total Dissolved Solids	1,230	mg/L
G273	Compliance	E005	05/01/2024	Turbidity, field	3.00	NTU
G275	Compliance	E005	05/02/2024	Antimony, total	0.0006 U	mg/L
G275	Compliance	E005	05/02/2024	Arsenic, total	0.00110	mg/L
G275	Compliance	E005	05/02/2024	Barium, total	0.0610	mg/L
G275	Compliance	E005	05/02/2024	Beryllium, total	0.0002 U	mg/L
G275	Compliance	E005	05/02/2024	Boron, total	1.57	mg/L
G275	Compliance	E005	05/02/2024	Cadmium, total	0.0002 U	mg/L
G275	Compliance	E005	05/02/2024	Calcium, total	141	mg/L
G275	Compliance	E005	05/02/2024	Chloride, total	11.0	mg/L
G275	Compliance	E005	05/02/2024	Chromium, total	0.00450 J+	mg/L
G275	Compliance	E005	05/02/2024	Cobalt, total	0.00100	mg/L
G275	Compliance	E005	05/02/2024	Dissolved Oxygen	4.95	mg/L
G275	Compliance	E005	05/02/2024	Fluoride, total	0.370	mg/L
G275	Compliance	E005	05/02/2024	Lead, total	0.00160	mg/L
G275	Compliance	E005	05/02/2024	Lithium, total	0.00770	mg/L
G275	Compliance	E005	05/02/2024	Mercury, total	0.00006 U	mg/L
G275	Compliance	E005	05/02/2024	Molybdenum, total	0.0006 U	mg/L
G275	Compliance	E005	05/02/2024	Oxidation Reduction Potential	70.0	mV
G275	Compliance	E005	05/02/2024	pH (field)	6.9	SU
G275	Compliance	E005	05/02/2024	Radium 226 + Radium 228, total	0.223	pCi/L
G275	Compliance	E005	05/02/2024	Selenium, total	0.00120 J+	mg/L
G275	Compliance	E005	05/02/2024	Specific Conductance @ 25C (field)	1,030	micromhos/cm
G275	Compliance	E005	05/02/2024	Sulfate, total	291	mg/L
G275	Compliance	E005	05/02/2024	Temperature	16.4	degrees C
G275	Compliance	E005	05/02/2024	Thallium, total	0.001 U	mg/L
G275	Compliance	E005	05/02/2024	Total Dissolved Solids	760	mg/L
G275	Compliance	E005	05/02/2024	Turbidity, field	20.0	NTU
G275D	Compliance	E005	05/02/2024	Antimony, total	0.0006 U	mg/L
G275D	Compliance	E005	05/02/2024	Arsenic, total	0.0156	mg/L
G275D	Compliance	E005	05/02/2024	Barium, total	0.437	mg/L
G275D	Compliance	E005	05/02/2024	Beryllium, total	0.0002 U	mg/L
G275D	Compliance	E005	05/02/2024	Boron, total	0.164	mg/L
G275D	Compliance	E005	05/02/2024	Cadmium, total	0.0002 U	mg/L
G275D	Compliance	E005	05/02/2024	Calcium, total	174	mg/L
G275D	Compliance	E005	05/02/2024	Chloride, total	20.0	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G275D	Compliance	E005	05/02/2024	Chromium, total	0.0015 UJ	mg/L
G275D	Compliance	E005	05/02/2024	Cobalt, total	0.00120	mg/L
G275D	Compliance	E005	05/02/2024	Dissolved Oxygen	0.580	mg/L
G275D	Compliance	E005	05/02/2024	Fluoride, total	0.570	mg/L
G275D	Compliance	E005	05/02/2024	Lead, total	0.0006 U	mg/L
G275D	Compliance	E005	05/02/2024	Lithium, total	0.00330	mg/L
G275D	Compliance	E005	05/02/2024	Mercury, total	0.000510	mg/L
G275D	Compliance	E005	05/02/2024	Molybdenum, total	0.00920	mg/L
G275D	Compliance	E005	05/02/2024	Oxidation Reduction Potential	-106	mV
G275D	Compliance	E005	05/02/2024	pH (field)	7.2	SU
G275D	Compliance	E005	05/02/2024	Radium 226 + Radium 228, total	1.37	pCi/L
G275D	Compliance	E005	05/02/2024	Selenium, total	0.0006 U	mg/L
G275D	Compliance	E005	05/02/2024	Specific Conductance @ 25C (field)	1,500	micromhos/cm
G275D	Compliance	E005	05/02/2024	Sulfate, total	181	mg/L
G275D	Compliance	E005	05/02/2024	Temperature	17.7	degrees C
G275D	Compliance	E005	05/02/2024	Thallium, total	0.001 U	mg/L
G275D	Compliance	E005	05/02/2024	Total Dissolved Solids	910	mg/L
G275D	Compliance	E005	05/02/2024	Turbidity, field	65.0	NTU
G276	Compliance	E005	05/07/2024	Antimony, total	0.0008 U	mg/L
G276	Compliance	E005	05/07/2024	Arsenic, total	0.0004 U	mg/L
G276	Compliance	E005	05/07/2024	Barium, total	0.0520	mg/L
G276	Compliance	E005	05/07/2024	Beryllium, total	0.0002 U	mg/L
G276	Compliance	E005	05/07/2024	Boron, total	0.0230	mg/L
G276	Compliance	E005	05/07/2024	Cadmium, total	0.0002 U	mg/L
G276	Compliance	E005	05/07/2024	Calcium, total	152	mg/L
G276	Compliance	E005	05/07/2024	Chloride, total	34.0	mg/L
G276	Compliance	E005	05/07/2024	Chromium, total	0.0015 UJ	mg/L
G276	Compliance	E005	05/07/2024	Cobalt, total	0.0001 U	mg/L
G276	Compliance	E005	05/07/2024	Dissolved Oxygen	5.02	mg/L
G276	Compliance	E005	05/07/2024	Fluoride, total	0.410	mg/L
G276	Compliance	E005	05/07/2024	Lead, total	0.0006 U	mg/L
G276	Compliance	E005	05/07/2024	Lithium, total	0.0115	mg/L
G276	Compliance	E005	05/07/2024	Mercury, total	0.00006 U	mg/L
G276	Compliance	E005	05/07/2024	Molybdenum, total	0.0011 J	mg/L
G276	Compliance	E005	05/07/2024	Oxidation Reduction Potential	60.0	mV
G276	Compliance	E005	05/07/2024	pH (field)	6.8	SU
G276	Compliance	E005	05/07/2024	Radium 226 + Radium 228, total	0.785	pCi/L
G276	Compliance	E005	05/07/2024	Selenium, total	0.0006 U	mg/L
G276	Compliance	E005	05/07/2024	Specific Conductance @ 25C (field)	1,210	micromhos/cm
G276	Compliance	E005	05/07/2024	Sulfate, total	284	mg/L
G276	Compliance	E005	05/07/2024	Temperature	18.1	degrees C
G276	Compliance	E005	05/07/2024	Thallium, total	0.001 U	mg/L
G276	Compliance	E005	05/07/2024	Total Dissolved Solids	890	mg/L
G276	Compliance	E005	05/07/2024	Turbidity, field	10.0	NTU
G277	Compliance	E005	05/07/2024	Antimony, total	0.0008 U	mg/L
G277	Compliance	E005	05/07/2024	Arsenic, total	0.0006 J	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G277	Compliance	E005	05/07/2024	Barium, total	0.0897	mg/L
G277	Compliance	E005	05/07/2024	Beryllium, total	0.0002 U	mg/L
G277	Compliance	E005	05/07/2024	Boron, total	0.0752	mg/L
G277	Compliance	E005	05/07/2024	Cadmium, total	0.0002 U	mg/L
G277	Compliance	E005	05/07/2024	Calcium, total	260	mg/L
G277	Compliance	E005	05/07/2024	Chloride, total	108	mg/L
G277	Compliance	E005	05/07/2024	Chromium, total	0.0015 UJ	mg/L
G277	Compliance	E005	05/07/2024	Cobalt, total	0.0001 U	mg/L
G277	Compliance	E005	05/07/2024	Dissolved Oxygen	4.56	mg/L
G277	Compliance	E005	05/07/2024	Fluoride, total	0.310	mg/L
G277	Compliance	E005	05/07/2024	Lead, total	0.0006 U	mg/L
G277	Compliance	E005	05/07/2024	Lithium, total	0.0100	mg/L
G277	Compliance	E005	05/07/2024	Mercury, total	0.00006 U	mg/L
G277	Compliance	E005	05/07/2024	Molybdenum, total	0.0014 J	mg/L
G277	Compliance	E005	05/07/2024	Oxidation Reduction Potential	107	mV
G277	Compliance	E005	05/07/2024	pH (field)	6.9	SU
G277	Compliance	E005	05/07/2024	Radium 226 + Radium 228, total	0.0358	pCi/L
G277	Compliance	E005	05/07/2024	Selenium, total	0.00150 J+	mg/L
G277	Compliance	E005	05/07/2024	Specific Conductance @ 25C (field)	1,830	micromhos/cm
G277	Compliance	E005	05/07/2024	Sulfate, total	485	mg/L
G277	Compliance	E005	05/07/2024	Temperature	15.4	degrees C
G277	Compliance	E005	05/07/2024	Thallium, total	0.001 U	mg/L
G277	Compliance	E005	05/07/2024	Total Dissolved Solids	1,430	mg/L
G277	Compliance	E005	05/07/2024	Turbidity, field	4.30	NTU
G279	Compliance	E005	05/03/2024	Antimony, total	0.0008 J	mg/L
G279	Compliance	E005	05/03/2024	Arsenic, total	0.0005 J	mg/L
G279	Compliance	E005	05/03/2024	Barium, total	0.0950	mg/L
G279	Compliance	E005	05/03/2024	Beryllium, total	0.0002 U	mg/L
G279	Compliance	E005	05/03/2024	Boron, total	1.32	mg/L
G279	Compliance	E005	05/03/2024	Cadmium, total	0.0002 U	mg/L
G279	Compliance	E005	05/03/2024	Calcium, total	316	mg/L
G279	Compliance	E005	05/03/2024	Chloride, total	104	mg/L
G279	Compliance	E005	05/03/2024	Chromium, total	0.0015 UJ	mg/L
G279	Compliance	E005	05/03/2024	Cobalt, total	0.0001 U	mg/L
G279	Compliance	E005	05/03/2024	Dissolved Oxygen	2.58	mg/L
G279	Compliance	E005	05/03/2024	Fluoride, total	0.480	mg/L
G279	Compliance	E005	05/03/2024	Lead, total	0.0006 U	mg/L
G279	Compliance	E005	05/03/2024	Lithium, total	0.00560	mg/L
G279	Compliance	E005	05/03/2024	Mercury, total	0.00006 UJ	mg/L
G279	Compliance	E005	05/03/2024	Molybdenum, total	0.00170	mg/L
G279	Compliance	E005	05/03/2024	Oxidation Reduction Potential	122	mV
G279	Compliance	E005	05/03/2024	pH (field)	6.8	SU
G279	Compliance	E005	05/03/2024	Radium 226 + Radium 228, total	0.508	pCi/L
G279	Compliance	E005	05/03/2024	Selenium, total	0.001 UJ	mg/L
G279	Compliance	E005	05/03/2024	Specific Conductance @ 25C (field)	2,560	micromhos/cm
G279	Compliance	E005	05/03/2024	Sulfate, total	654	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G279	Compliance	E005	05/03/2024	Temperature	16.6	degrees C
G279	Compliance	E005	05/03/2024	Thallium, total	0.001 U	mg/L
G279	Compliance	E005	05/03/2024	Total Dissolved Solids	1,450	mg/L
G279	Compliance	E005	05/03/2024	Turbidity, field	1.90	NTU
G283	Compliance	E005	05/06/2024	Antimony, total	0.0006 U	mg/L
G283	Compliance	E005	05/06/2024	Arsenic, total	0.0004 J	mg/L
G283	Compliance	E005	05/06/2024	Barium, total	0.155	mg/L
G283	Compliance	E005	05/06/2024	Beryllium, total	0.0002 U	mg/L
G283	Compliance	E005	05/06/2024	Boron, total	0.0309	mg/L
G283	Compliance	E005	05/06/2024	Cadmium, total	0.0002 U	mg/L
G283	Compliance	E005	05/06/2024	Calcium, total	143	mg/L
G283	Compliance	E005	05/06/2024	Chloride, total	40.0	mg/L
G283	Compliance	E005	05/06/2024	Chromium, total	0.0015 UJ	mg/L
G283	Compliance	E005	05/06/2024	Cobalt, total	0.0001 U	mg/L
G283	Compliance	E005	05/06/2024	Dissolved Oxygen	0.690	mg/L
G283	Compliance	E005	05/06/2024	Fluoride, total	0.360	mg/L
G283	Compliance	E005	05/06/2024	Lead, total	0.0006 U	mg/L
G283	Compliance	E005	05/06/2024	Lithium, total	0.00950	mg/L
G283	Compliance	E005	05/06/2024	Mercury, total	0.00006 U	mg/L
G283	Compliance	E005	05/06/2024	Molybdenum, total	0.00210	mg/L
G283	Compliance	E005	05/06/2024	Oxidation Reduction Potential	-74.0	mV
G283	Compliance	E005	05/06/2024	pH (field)	7.0	SU
G283	Compliance	E005	05/06/2024	Radium 226 + Radium 228, total	1.49	pCi/L
G283	Compliance	E005	05/06/2024	Selenium, total	0.0006 U	mg/L
G283	Compliance	E005	05/06/2024	Specific Conductance @ 25C (field)	1,190	micromhos/cm
G283	Compliance	E005	05/06/2024	Sulfate, total	250	mg/L
G283	Compliance	E005	05/06/2024	Temperature	13.1	degrees C
G283	Compliance	E005	05/06/2024	Thallium, total	0.001 U	mg/L
G283	Compliance	E005	05/06/2024	Total Dissolved Solids	905	mg/L
G283	Compliance	E005	05/06/2024	Turbidity, field	6.50	NTU
G284	Compliance	E005	05/06/2024	Antimony, total	0.0006 U	mg/L
G284	Compliance	E005	05/06/2024	Arsenic, total	0.0005 J	mg/L
G284	Compliance	E005	05/06/2024	Barium, total	0.0622	mg/L
G284	Compliance	E005	05/06/2024	Beryllium, total	0.0002 U	mg/L
G284	Compliance	E005	05/06/2024	Boron, total	0.0278	mg/L
G284	Compliance	E005	05/06/2024	Cadmium, total	0.0002 U	mg/L
G284	Compliance	E005	05/06/2024	Calcium, total	65.4	mg/L
G284	Compliance	E005	05/06/2024	Chloride, total	26.0	mg/L
G284	Compliance	E005	05/06/2024	Chromium, total	0.0015 UJ	mg/L
G284	Compliance	E005	05/06/2024	Cobalt, total	0.0001 U	mg/L
G284	Compliance	E005	05/06/2024	Dissolved Oxygen	2.89	mg/L
G284	Compliance	E005	05/06/2024	Fluoride, total	0.460	mg/L
G284	Compliance	E005	05/06/2024	Lead, total	0.0006 U	mg/L
G284	Compliance	E005	05/06/2024	Lithium, total	0.00990	mg/L
G284	Compliance	E005	05/06/2024	Mercury, total	0.00006 U	mg/L
G284	Compliance	E005	05/06/2024	Molybdenum, total	0.0280	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G284	Compliance	E005	05/06/2024	Oxidation Reduction Potential	52.0	mV
G284	Compliance	E005	05/06/2024	pH (field)	7.2	SU
G284	Compliance	E005	05/06/2024	Radium 226 + Radium 228, total	0.474	pCi/L
G284	Compliance	E005	05/06/2024	Selenium, total	0.001 UJ	mg/L
G284	Compliance	E005	05/06/2024	Specific Conductance @ 25C (field)	717	micromhos/cm
G284	Compliance	E005	05/06/2024	Sulfate, total	67.0	mg/L
G284	Compliance	E005	05/06/2024	Temperature	12.5	degrees C
G284	Compliance	E005	05/06/2024	Thallium, total	0.001 U	mg/L
G284	Compliance	E005	05/06/2024	Total Dissolved Solids	478	mg/L
G284	Compliance	E005	05/06/2024	Turbidity, field	1.00 U	NTU
G285	Compliance	E005	05/06/2024	Antimony, total	0.0009 J	mg/L
G285	Compliance	E005	05/06/2024	Arsenic, total	0.0005 J	mg/L
G285	Compliance	E005	05/06/2024	Barium, total	0.0388	mg/L
G285	Compliance	E005	05/06/2024	Beryllium, total	0.0002 U	mg/L
G285	Compliance	E005	05/06/2024	Boron, total	0.0947	mg/L
G285	Compliance	E005	05/06/2024	Cadmium, total	0.0002 U	mg/L
G285	Compliance	E005	05/06/2024	Calcium, total	252	mg/L
G285	Compliance	E005	05/06/2024	Chloride, total	31.0	mg/L
G285	Compliance	E005	05/06/2024	Chromium, total	0.00240 J+	mg/L
G285	Compliance	E005	05/06/2024	Cobalt, total	0.00210	mg/L
G285	Compliance	E005	05/06/2024	Dissolved Oxygen	0.660	mg/L
G285	Compliance	E005	05/06/2024	Fluoride, total	0.380	mg/L
G285	Compliance	E005	05/06/2024	Lead, total	0.0006 U	mg/L
G285	Compliance	E005	05/06/2024	Lithium, total	0.00700	mg/L
G285	Compliance	E005	05/06/2024	Mercury, total	0.00006 U	mg/L
G285	Compliance	E005	05/06/2024	Molybdenum, total	0.00300	mg/L
G285	Compliance	E005	05/06/2024	Oxidation Reduction Potential	79.0	mV
G285	Compliance	E005	05/06/2024	pH (field)	6.7	SU
G285	Compliance	E005	05/06/2024	Radium 226 + Radium 228, total	1.22	pCi/L
G285	Compliance	E005	05/06/2024	Selenium, total	0.0006 U	mg/L
G285	Compliance	E005	05/06/2024	Specific Conductance @ 25C (field)	2,000	micromhos/cm
G285	Compliance	E005	05/06/2024	Sulfate, total	668	mg/L
G285	Compliance	E005	05/06/2024	Temperature	13.1	degrees C
G285	Compliance	E005	05/06/2024	Thallium, total	0.001 U	mg/L
G285	Compliance	E005	05/06/2024	Total Dissolved Solids	1,620	mg/L
G285	Compliance	E005	05/06/2024	Turbidity, field	7.80	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 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 RECYCLE POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G270	Background	E006	08/07/2024	Antimony, total	0.0004 U	mg/L
G270	Background	E006	08/07/2024	Arsenic, total	0.0009 J	mg/L
G270	Background	E006	08/07/2024	Barium, total	0.0478	mg/L
G270	Background	E006	08/07/2024	Beryllium, total	0.0002 U	mg/L
G270	Background	E006	08/07/2024	Boron, total	0.015 J	mg/L
G270	Background	E006	08/07/2024	Cadmium, total	0.0002 U	mg/L
G270	Background	E006	08/07/2024	Calcium, total	62.1	mg/L
G270	Background	E006	08/07/2024	Chloride, total	14.0	mg/L
G270	Background	E006	08/07/2024	Chromium, total	0.00190	mg/L
G270	Background	E006	08/07/2024	Cobalt, total	0.0007 J	mg/L
G270	Background	E006	08/07/2024	Dissolved Oxygen	1.06	mg/L
G270	Background	E006	08/07/2024	Fluoride, total	0.31 J	mg/L
G270	Background	E006	08/07/2024	Lead, total	0.0008 J	mg/L
G270	Background	E006	08/07/2024	Lithium, total	0.00360	mg/L
G270	Background	E006	08/07/2024	Mercury, total	0.00006 U	mg/L
G270	Background	E006	08/07/2024	Molybdenum, total	0.0011 J	mg/L
G270	Background	E006	08/07/2024	Oxidation Reduction Potential	-63.0	mV
G270	Background	E006	08/07/2024	pH (field)	6.9	SU
G270	Background	E006	08/07/2024	Radium 226 + Radium 228, total	0.16	pCi/L
G270	Background	E006	08/07/2024	Selenium, total	0.0006 U	mg/L
G270	Background	E006	08/07/2024	Specific Conductance @ 25C (field)	556	micromhos/cm
G270	Background	E006	08/07/2024	Sulfate, total	65.0	mg/L
G270	Background	E006	08/07/2024	Temperature	17.8	degrees C
G270	Background	E006	08/07/2024	Thallium, total	0.001 U	mg/L
G270	Background	E006	08/07/2024	Total Dissolved Solids	482 J	mg/L
G270	Background	E006	08/07/2024	Turbidity, field	54.0	NTU
G280	Background	E006	07/30/2024	Antimony, total	0.0004 U	mg/L
G280	Background	E006	07/30/2024	Arsenic, total	0.0004 U	mg/L
G280	Background	E006	07/30/2024	Barium, total	0.0515	mg/L
G280	Background	E006	07/30/2024	Beryllium, total	0.0002 U	mg/L
G280	Background	E006	07/30/2024	Boron, total	0.014 J	mg/L
G280	Background	E006	07/30/2024	Cadmium, total	0.0002 U	mg/L
G280	Background	E006	07/30/2024	Calcium, total	94.7	mg/L
G280	Background	E006	07/30/2024	Chloride, total	76.0	mg/L
G280	Background	E006	07/30/2024	Chromium, total	0.0007 U	mg/L
G280	Background	E006	07/30/2024	Cobalt, total	0.0001 U	mg/L
G280	Background	E006	07/30/2024	Dissolved Oxygen	0.350	mg/L
G280	Background	E006	07/30/2024	Fluoride, total	0.29 J	mg/L
G280	Background	E006	07/30/2024	Lead, total	0.0006 U	mg/L
G280	Background	E006	07/30/2024	Lithium, total	0.00390	mg/L
G280	Background	E006	07/30/2024	Mercury, total	0.00006 U	mg/L
G280	Background	E006	07/30/2024	Molybdenum, total	0.0008 J	mg/L
G280	Background	E006	07/30/2024	Oxidation Reduction Potential	89.0	mV
G280	Background	E006	07/30/2024	pH (field)	7.4	SU
G280	Background	E006	07/30/2024	Radium 226 + Radium 228, total	0.301	pCi/L
G280	Background	E006	07/30/2024	Selenium, total	0.0006 U	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G280	Background	E006	07/30/2024	Specific Conductance @ 25C (field)	867	micromhos/cm
G280	Background	E006	07/30/2024	Sulfate, total	96.0	mg/L
G280	Background	E006	07/30/2024	Temperature	17.2	degrees C
G280	Background	E006	07/30/2024	Thallium, total	0.001 U	mg/L
G280	Background	E006	07/30/2024	Total Dissolved Solids	578	mg/L
G280	Background	E006	07/30/2024	Turbidity, field	63.0	NTU
G271	Compliance	E006	07/31/2024	Antimony, total	0.0008 J	mg/L
G271	Compliance	E006	07/31/2024	Arsenic, total	0.0005 J	mg/L
G271	Compliance	E006	07/31/2024	Barium, total	0.0249	mg/L
G271	Compliance	E006	07/31/2024	Beryllium, total	0.0002 U	mg/L
G271	Compliance	E006	07/31/2024	Boron, total	0.626	mg/L
G271	Compliance	E006	07/31/2024	Cadmium, total	0.0002 U	mg/L
G271	Compliance	E006	07/31/2024	Calcium, total	81.9	mg/L
G271	Compliance	E006	07/31/2024	Chloride, total	45.0	mg/L
G271	Compliance	E006	07/31/2024	Chromium, total	0.0012 J	mg/L
G271	Compliance	E006	07/31/2024	Cobalt, total	0.0002 J	mg/L
G271	Compliance	E006	07/31/2024	Dissolved Oxygen	3.07	mg/L
G271	Compliance	E006	07/31/2024	Fluoride, total	0.550	mg/L
G271	Compliance	E006	07/31/2024	Lead, total	0.0006 U	mg/L
G271	Compliance	E006	07/31/2024	Lithium, total	0.00360	mg/L
G271	Compliance	E006	07/31/2024	Mercury, total	0.00006 U	mg/L
G271	Compliance	E006	07/31/2024	Molybdenum, total	0.0011 J	mg/L
G271	Compliance	E006	07/31/2024	Oxidation Reduction Potential	197	mV
G271	Compliance	E006	07/31/2024	pH (field)	7.1	SU
G271	Compliance	E006	07/31/2024	Radium 226 + Radium 228, total	0.312	pCi/L
G271	Compliance	E006	07/31/2024	Selenium, total	0.00170	mg/L
G271	Compliance	E006	07/31/2024	Specific Conductance @ 25C (field)	1,040	micromhos/cm
G271	Compliance	E006	07/31/2024	Sulfate, total	206	mg/L
G271	Compliance	E006	07/31/2024	Temperature	17.4	degrees C
G271	Compliance	E006	07/31/2024	Thallium, total	0.001 U	mg/L
G271	Compliance	E006	07/31/2024	Total Dissolved Solids	604	mg/L
G271	Compliance	E006	07/31/2024	Turbidity, field	1.80	NTU
G273	Compliance	E006	07/31/2024	Antimony, total	0.0004 U	mg/L
G273	Compliance	E006	07/31/2024	Arsenic, total	0.0009 J	mg/L
G273	Compliance	E006	07/31/2024	Barium, total	0.0404	mg/L
G273	Compliance	E006	07/31/2024	Beryllium, total	0.0002 U	mg/L
G273	Compliance	E006	07/31/2024	Boron, total	0.0567	mg/L
G273	Compliance	E006	07/31/2024	Cadmium, total	0.0002 U	mg/L
G273	Compliance	E006	07/31/2024	Calcium, total	180	mg/L
G273	Compliance	E006	07/31/2024	Chloride, total	84.0	mg/L
G273	Compliance	E006	07/31/2024	Chromium, total	0.0007 U	mg/L
G273	Compliance	E006	07/31/2024	Cobalt, total	0.0001 J	mg/L
G273	Compliance	E006	07/31/2024	Dissolved Oxygen	1.09	mg/L
G273	Compliance	E006	07/31/2024	Fluoride, total	0.3 J	mg/L
G273	Compliance	E006	07/31/2024	Lead, total	0.0006 U	mg/L
G273	Compliance	E006	07/31/2024	Lithium, total	0.00890	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2024
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COFFEEN POWER PLANT
GMF RECYCLE POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G273	Compliance	E006	07/31/2024	Mercury, total	0.00006 U	mg/L
G273	Compliance	E006	07/31/2024	Molybdenum, total	0.0012 J	mg/L
G273	Compliance	E006	07/31/2024	Oxidation Reduction Potential	73.0	mV
G273	Compliance	E006	07/31/2024	pH (field)	7.0	SU
G273	Compliance	E006	07/31/2024	Radium 226 + Radium 228, total	0.064	pCi/L
G273	Compliance	E006	07/31/2024	Selenium, total	0.0006 U	mg/L
G273	Compliance	E006	07/31/2024	Specific Conductance @ 25C (field)	1,570	micromhos/cm
G273	Compliance	E006	07/31/2024	Sulfate, total	438	mg/L
G273	Compliance	E006	07/31/2024	Temperature	18.5	degrees C
G273	Compliance	E006	07/31/2024	Thallium, total	0.001 U	mg/L
G273	Compliance	E006	07/31/2024	Total Dissolved Solids	1,110	mg/L
G273	Compliance	E006	07/31/2024	Turbidity, field	4.40	NTU
G275	Compliance	E006	08/01/2024	Antimony, total	0.0005 J	mg/L
G275	Compliance	E006	08/01/2024	Arsenic, total	0.0004 U	mg/L
G275	Compliance	E006	08/01/2024	Barium, total	0.0327	mg/L
G275	Compliance	E006	08/01/2024	Beryllium, total	0.0002 U	mg/L
G275	Compliance	E006	08/01/2024	Boron, total	2.65	mg/L
G275	Compliance	E006	08/01/2024	Cadmium, total	0.0002 U	mg/L
G275	Compliance	E006	08/01/2024	Calcium, total	163	mg/L
G275	Compliance	E006	08/01/2024	Chloride, total	16.0	mg/L
G275	Compliance	E006	08/01/2024	Chromium, total	0.0007 U	mg/L
G275	Compliance	E006	08/01/2024	Cobalt, total	0.0002 J	mg/L
G275	Compliance	E006	08/01/2024	Dissolved Oxygen	0.930	mg/L
G275	Compliance	E006	08/01/2024	Fluoride, total	0.34 J	mg/L
G275	Compliance	E006	08/01/2024	Lead, total	0.0006 U	mg/L
G275	Compliance	E006	08/01/2024	Lithium, total	0.00840	mg/L
G275	Compliance	E006	08/01/2024	Mercury, total	0.00006 U	mg/L
G275	Compliance	E006	08/01/2024	Molybdenum, total	0.0006 U	mg/L
G275	Compliance	E006	08/01/2024	Oxidation Reduction Potential	-29.0	mV
G275	Compliance	E006	08/01/2024	pH (field)	7.0	SU
G275	Compliance	E006	08/01/2024	Radium 226 + Radium 228, total	0.605	pCi/L
G275	Compliance	E006	08/01/2024	Selenium, total	0.0006 U	mg/L
G275	Compliance	E006	08/01/2024	Specific Conductance @ 25C (field)	1,210	micromhos/cm
G275	Compliance	E006	08/01/2024	Sulfate, total	374	mg/L
G275	Compliance	E006	08/01/2024	Temperature	18.6	degrees C
G275	Compliance	E006	08/01/2024	Thallium, total	0.001 U	mg/L
G275	Compliance	E006	08/01/2024	Total Dissolved Solids	976	mg/L
G275	Compliance	E006	08/01/2024	Turbidity, field	8.40	NTU
G275D	Compliance	E006	08/01/2024	Antimony, total	0.0006 J	mg/L
G275D	Compliance	E006	08/01/2024	Arsenic, total	0.0199	mg/L
G275D	Compliance	E006	08/01/2024	Barium, total	0.433	mg/L
G275D	Compliance	E006	08/01/2024	Beryllium, total	0.0002 U	mg/L
G275D	Compliance	E006	08/01/2024	Boron, total	0.170	mg/L
G275D	Compliance	E006	08/01/2024	Cadmium, total	0.0002 U	mg/L
G275D	Compliance	E006	08/01/2024	Calcium, total	166	mg/L
G275D	Compliance	E006	08/01/2024	Chloride, total	21.0	mg/L

TABLE 1.
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COFFEEN POWER PLANT
GMF RECYCLE POND
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G275D	Compliance	E006	08/01/2024	Chromium, total	0.0012 J	mg/L
G275D	Compliance	E006	08/01/2024	Cobalt, total	0.0006 J	mg/L
G275D	Compliance	E006	08/01/2024	Dissolved Oxygen	0.640	mg/L
G275D	Compliance	E006	08/01/2024	Fluoride, total	0.46 J	mg/L
G275D	Compliance	E006	08/01/2024	Lead, total	0.0006 U	mg/L
G275D	Compliance	E006	08/01/2024	Lithium, total	0.00300	mg/L
G275D	Compliance	E006	08/01/2024	Mercury, total	0.00006 U	mg/L
G275D	Compliance	E006	08/01/2024	Molybdenum, total	0.0008 J	mg/L
G275D	Compliance	E006	08/01/2024	Oxidation Reduction Potential	-132	mV
G275D	Compliance	E006	08/01/2024	pH (field)	7.3	SU
G275D	Compliance	E006	08/01/2024	Radium 226 + Radium 228, total	1.12	pCi/L
G275D	Compliance	E006	08/01/2024	Selenium, total	0.0006 U	mg/L
G275D	Compliance	E006	08/01/2024	Specific Conductance @ 25C (field)	1,490	micromhos/cm
G275D	Compliance	E006	08/01/2024	Sulfate, total	143	mg/L
G275D	Compliance	E006	08/01/2024	Temperature	16.7	degrees C
G275D	Compliance	E006	08/01/2024	Thallium, total	0.001 U	mg/L
G275D	Compliance	E006	08/01/2024	Total Dissolved Solids	964	mg/L
G275D	Compliance	E006	08/01/2024	Turbidity, field	8.50	NTU
G276	Compliance	E006	07/31/2024	Antimony, total	0.00110	mg/L
G276	Compliance	E006	07/31/2024	Arsenic, total	0.0007 J	mg/L
G276	Compliance	E006	07/31/2024	Barium, total	0.0715	mg/L
G276	Compliance	E006	07/31/2024	Beryllium, total	0.0002 U	mg/L
G276	Compliance	E006	07/31/2024	Boron, total	0.0270	mg/L
G276	Compliance	E006	07/31/2024	Cadmium, total	0.0002 U	mg/L
G276	Compliance	E006	07/31/2024	Calcium, total	157	mg/L
G276	Compliance	E006	07/31/2024	Chloride, total	32.0	mg/L
G276	Compliance	E006	07/31/2024	Chromium, total	0.00240	mg/L
G276	Compliance	E006	07/31/2024	Cobalt, total	0.0001 J	mg/L
G276	Compliance	E006	07/31/2024	Dissolved Oxygen	3.83	mg/L
G276	Compliance	E006	07/31/2024	Fluoride, total	0.31 J	mg/L
G276	Compliance	E006	07/31/2024	Lead, total	0.0006 J	mg/L
G276	Compliance	E006	07/31/2024	Lithium, total	0.00990	mg/L
G276	Compliance	E006	07/31/2024	Mercury, total	0.00006 U	mg/L
G276	Compliance	E006	07/31/2024	Molybdenum, total	0.00180	mg/L
G276	Compliance	E006	07/31/2024	Oxidation Reduction Potential	64.0	mV
G276	Compliance	E006	07/31/2024	pH (field)	6.9	SU
G276	Compliance	E006	07/31/2024	Radium 226 + Radium 228, total	0.623	pCi/L
G276	Compliance	E006	07/31/2024	Selenium, total	0.0008 J	mg/L
G276	Compliance	E006	07/31/2024	Specific Conductance @ 25C (field)	1,320	micromhos/cm
G276	Compliance	E006	07/31/2024	Sulfate, total	293	mg/L
G276	Compliance	E006	07/31/2024	Temperature	19.7	degrees C
G276	Compliance	E006	07/31/2024	Thallium, total	0.001 U	mg/L
G276	Compliance	E006	07/31/2024	Total Dissolved Solids	954	mg/L
G276	Compliance	E006	07/31/2024	Turbidity, field	3.50	NTU
G277	Compliance	E006	07/30/2024	Antimony, total	0.0004 U	mg/L
G277	Compliance	E006	07/30/2024	Arsenic, total	0.00150	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G277	Compliance	E006	07/30/2024	Barium, total	0.0517	mg/L
G277	Compliance	E006	07/30/2024	Beryllium, total	0.0002 U	mg/L
G277	Compliance	E006	07/30/2024	Boron, total	0.287	mg/L
G277	Compliance	E006	07/30/2024	Cadmium, total	0.0002 U	mg/L
G277	Compliance	E006	07/30/2024	Calcium, total	393	mg/L
G277	Compliance	E006	07/30/2024	Chloride, total	209	mg/L
G277	Compliance	E006	07/30/2024	Chromium, total	0.00400	mg/L
G277	Compliance	E006	07/30/2024	Cobalt, total	0.0007 J	mg/L
G277	Compliance	E006	07/30/2024	Dissolved Oxygen	3.08	mg/L
G277	Compliance	E006	07/30/2024	Fluoride, total	0.24 J	mg/L
G277	Compliance	E006	07/30/2024	Lead, total	0.00130	mg/L
G277	Compliance	E006	07/30/2024	Lithium, total	0.0142	mg/L
G277	Compliance	E006	07/30/2024	Mercury, total	0.00006 U	mg/L
G277	Compliance	E006	07/30/2024	Molybdenum, total	0.0008 J	mg/L
G277	Compliance	E006	07/30/2024	Oxidation Reduction Potential	112	mV
G277	Compliance	E006	07/30/2024	pH (field)	6.9	SU
G277	Compliance	E006	07/30/2024	Radium 226 + Radium 228, total	0.502	pCi/L
G277	Compliance	E006	07/30/2024	Selenium, total	0.0008 J	mg/L
G277	Compliance	E006	07/30/2024	Specific Conductance @ 25C (field)	2,650	micromhos/cm
G277	Compliance	E006	07/30/2024	Sulfate, total	1,090	mg/L
G277	Compliance	E006	07/30/2024	Temperature	20.3	degrees C
G277	Compliance	E006	07/30/2024	Thallium, total	0.001 U	mg/L
G277	Compliance	E006	07/30/2024	Total Dissolved Solids	2,390	mg/L
G277	Compliance	E006	07/30/2024	Turbidity, field	15.0	NTU
G279	Compliance	E006	07/30/2024	Antimony, total	0.0004 U	mg/L
G279	Compliance	E006	07/30/2024	Arsenic, total	0.0007 J	mg/L
G279	Compliance	E006	07/30/2024	Barium, total	0.0263	mg/L
G279	Compliance	E006	07/30/2024	Beryllium, total	0.0002 U	mg/L
G279	Compliance	E006	07/30/2024	Boron, total	6.73	mg/L
G279	Compliance	E006	07/30/2024	Cadmium, total	0.0003 J	mg/L
G279	Compliance	E006	07/30/2024	Calcium, total	714	mg/L
G279	Compliance	E006	07/30/2024	Chloride, total	598	mg/L
G279	Compliance	E006	07/30/2024	Chromium, total	0.0007 U	mg/L
G279	Compliance	E006	07/30/2024	Cobalt, total	0.0001 J	mg/L
G279	Compliance	E006	07/30/2024	Dissolved Oxygen	0.420	mg/L
G279	Compliance	E006	07/30/2024	Fluoride, total	0.27 J	mg/L
G279	Compliance	E006	07/30/2024	Lead, total	0.0006 U	mg/L
G279	Compliance	E006	07/30/2024	Lithium, total	0.0249	mg/L
G279	Compliance	E006	07/30/2024	Mercury, total	0.00006 UJ	mg/L
G279	Compliance	E006	07/30/2024	Molybdenum, total	0.0008 J	mg/L
G279	Compliance	E006	07/30/2024	Oxidation Reduction Potential	153	mV
G279	Compliance	E006	07/30/2024	pH (field)	6.6	SU
G279	Compliance	E006	07/30/2024	Radium 226 + Radium 228, total	0.178	pCi/L
G279	Compliance	E006	07/30/2024	Selenium, total	0.00210	mg/L
G279	Compliance	E006	07/30/2024	Specific Conductance @ 25C (field)	6,420	micromhos/cm
G279	Compliance	E006	07/30/2024	Sulfate, total	3,930	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G279	Compliance	E006	07/30/2024	Temperature	17.7	degrees C
G279	Compliance	E006	07/30/2024	Thallium, total	0.0014 J	mg/L
G279	Compliance	E006	07/30/2024	Total Dissolved Solids	3,920	mg/L
G279	Compliance	E006	07/30/2024	Turbidity, field	3.90	NTU
G283	Compliance	E006	08/07/2024	Antimony, total	0.0007 J	mg/L
G283	Compliance	E006	08/07/2024	Arsenic, total	0.0007 J	mg/L
G283	Compliance	E006	08/07/2024	Barium, total	0.158	mg/L
G283	Compliance	E006	08/07/2024	Beryllium, total	0.0002 U	mg/L
G283	Compliance	E006	08/07/2024	Boron, total	0.0781	mg/L
G283	Compliance	E006	08/07/2024	Cadmium, total	0.0002 U	mg/L
G283	Compliance	E006	08/07/2024	Calcium, total	141	mg/L
G283	Compliance	E006	08/07/2024	Chloride, total	40.0	mg/L
G283	Compliance	E006	08/07/2024	Chromium, total	0.0007 J	mg/L
G283	Compliance	E006	08/07/2024	Cobalt, total	0.0001 U	mg/L
G283	Compliance	E006	08/07/2024	Dissolved Oxygen	0.730	mg/L
G283	Compliance	E006	08/07/2024	Fluoride, total	0.37 J	mg/L
G283	Compliance	E006	08/07/2024	Lead, total	0.0006 U	mg/L
G283	Compliance	E006	08/07/2024	Lithium, total	0.00960	mg/L
G283	Compliance	E006	08/07/2024	Mercury, total	0.00006 U	mg/L
G283	Compliance	E006	08/07/2024	Molybdenum, total	0.00160	mg/L
G283	Compliance	E006	08/07/2024	Oxidation Reduction Potential	-74.0	mV
G283	Compliance	E006	08/07/2024	pH (field)	6.9	SU
G283	Compliance	E006	08/07/2024	Radium 226 + Radium 228, total	1.26	pCi/L
G283	Compliance	E006	08/07/2024	Selenium, total	0.0006 U	mg/L
G283	Compliance	E006	08/07/2024	Specific Conductance @ 25C (field)	958	micromhos/cm
G283	Compliance	E006	08/07/2024	Sulfate, total	268	mg/L
G283	Compliance	E006	08/07/2024	Temperature	16.7	degrees C
G283	Compliance	E006	08/07/2024	Thallium, total	0.001 U	mg/L
G283	Compliance	E006	08/07/2024	Total Dissolved Solids	950 J	mg/L
G283	Compliance	E006	08/07/2024	Turbidity, field	48.0	NTU
G284	Compliance	E006	08/07/2024	Antimony, total	0.00110	mg/L
G284	Compliance	E006	08/07/2024	Arsenic, total	0.0009 J	mg/L
G284	Compliance	E006	08/07/2024	Barium, total	0.0700	mg/L
G284	Compliance	E006	08/07/2024	Beryllium, total	0.0002 U	mg/L
G284	Compliance	E006	08/07/2024	Boron, total	0.0880	mg/L
G284	Compliance	E006	08/07/2024	Cadmium, total	0.0002 U	mg/L
G284	Compliance	E006	08/07/2024	Calcium, total	66.1	mg/L
G284	Compliance	E006	08/07/2024	Chloride, total	21.0	mg/L
G284	Compliance	E006	08/07/2024	Chromium, total	0.0014 J	mg/L
G284	Compliance	E006	08/07/2024	Cobalt, total	0.0001 U	mg/L
G284	Compliance	E006	08/07/2024	Dissolved Oxygen	2.04	mg/L
G284	Compliance	E006	08/07/2024	Fluoride, total	0.49 J	mg/L
G284	Compliance	E006	08/07/2024	Lead, total	0.0006 U	mg/L
G284	Compliance	E006	08/07/2024	Lithium, total	0.00930	mg/L
G284	Compliance	E006	08/07/2024	Mercury, total	0.00006 U	mg/L
G284	Compliance	E006	08/07/2024	Molybdenum, total	0.0276	mg/L

TABLE 1.
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COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G284	Compliance	E006	08/07/2024	Oxidation Reduction Potential	63.0	mV
G284	Compliance	E006	08/07/2024	pH (field)	6.9	SU
G284	Compliance	E006	08/07/2024	Radium 226 + Radium 228, total	0.783	pCi/L
G284	Compliance	E006	08/07/2024	Selenium, total	0.00160	mg/L
G284	Compliance	E006	08/07/2024	Specific Conductance @ 25C (field)	590	micromhos/cm
G284	Compliance	E006	08/07/2024	Sulfate, total	70.0	mg/L
G284	Compliance	E006	08/07/2024	Temperature	17.6	degrees C
G284	Compliance	E006	08/07/2024	Thallium, total	0.001 U	mg/L
G284	Compliance	E006	08/07/2024	Total Dissolved Solids	472 J	mg/L
G284	Compliance	E006	08/07/2024	Turbidity, field	5.20	NTU
G285	Compliance	E006	08/07/2024	Antimony, total	0.0004 U	mg/L
G285	Compliance	E006	08/07/2024	Arsenic, total	0.00140	mg/L
G285	Compliance	E006	08/07/2024	Barium, total	0.0408	mg/L
G285	Compliance	E006	08/07/2024	Beryllium, total	0.0002 U	mg/L
G285	Compliance	E006	08/07/2024	Boron, total	0.116	mg/L
G285	Compliance	E006	08/07/2024	Cadmium, total	0.0002 U	mg/L
G285	Compliance	E006	08/07/2024	Calcium, total	251	mg/L
G285	Compliance	E006	08/07/2024	Chloride, total	31.0	mg/L
G285	Compliance	E006	08/07/2024	Chromium, total	0.00150 J	mg/L
G285	Compliance	E006	08/07/2024	Cobalt, total	0.00890	mg/L
G285	Compliance	E006	08/07/2024	Dissolved Oxygen	1.43	mg/L
G285	Compliance	E006	08/07/2024	Fluoride, total	0.28 J	mg/L
G285	Compliance	E006	08/07/2024	Lead, total	0.0006 U	mg/L
G285	Compliance	E006	08/07/2024	Lithium, total	0.00610	mg/L
G285	Compliance	E006	08/07/2024	Mercury, total	0.00006 U	mg/L
G285	Compliance	E006	08/07/2024	Molybdenum, total	0.00280	mg/L
G285	Compliance	E006	08/07/2024	Oxidation Reduction Potential	-116	mV
G285	Compliance	E006	08/07/2024	pH (field)	6.6	SU
G285	Compliance	E006	08/07/2024	Radium 226 + Radium 228, total	1.74	pCi/L
G285	Compliance	E006	08/07/2024	Selenium, total	0.0006 U	mg/L
G285	Compliance	E006	08/07/2024	Specific Conductance @ 25C (field)	1,620	micromhos/cm
G285	Compliance	E006	08/07/2024	Sulfate, total	718	mg/L
G285	Compliance	E006	08/07/2024	Temperature	19.5	degrees C
G285	Compliance	E006	08/07/2024	Thallium, total	0.001 U	mg/L
G285	Compliance	E006	08/07/2024	Total Dissolved Solids	1,830 J	mg/L
G285	Compliance	E006	08/07/2024	Turbidity, field	35.0	NTU

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

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.
- UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G270	Background	E007	10/29/2024	Antimony, total	0.0004 U	mg/L
G270	Background	E007	10/29/2024	Arsenic, total	0.0008 J	mg/L
G270	Background	E007	10/29/2024	Barium, total	0.0631	mg/L
G270	Background	E007	10/29/2024	Beryllium, total	0.0002 U	mg/L
G270	Background	E007	10/29/2024	Boron, total	0.0092 U	mg/L
G270	Background	E007	10/29/2024	Cadmium, total	0.0002 U	mg/L
G270	Background	E007	10/29/2024	Calcium, total	61.0	mg/L
G270	Background	E007	10/29/2024	Chloride, total	13.9	mg/L
G270	Background	E007	10/29/2024	Chromium, total	0.0007 U	mg/L
G270	Background	E007	10/29/2024	Cobalt, total	0.0001 U	mg/L
G270	Background	E007	10/29/2024	Dissolved Oxygen	1.47	mg/L
G270	Background	E007	10/29/2024	Fluoride, total	0.2 J	mg/L
G270	Background	E007	10/29/2024	Lead, total	0.0006 U	mg/L
G270	Background	E007	10/29/2024	Lithium, total	0.00470	mg/L
G270	Background	E007	10/29/2024	Mercury, total	0.00006 U	mg/L
G270	Background	E007	10/29/2024	Molybdenum, total	0.00170	mg/L
G270	Background	E007	10/29/2024	Oxidation Reduction Potential	-47.0	mV
G270	Background	E007	10/29/2024	pH (field)	6.8	SU
G270	Background	E007	10/29/2024	Radium 226 + Radium 228, total	0.295	pCi/L
G270	Background	E007	10/29/2024	Selenium, total	0.0006 U	mg/L
G270	Background	E007	10/29/2024	Specific Conductance @ 25C (field)	647	micromhos/cm
G270	Background	E007	10/29/2024	Sulfate, total	47.3	mg/L
G270	Background	E007	10/29/2024	Temperature	16.8	degrees C
G270	Background	E007	10/29/2024	Thallium, total	0.001 U	mg/L
G270	Background	E007	10/29/2024	Total Dissolved Solids	418	mg/L
G270	Background	E007	10/29/2024	Turbidity, field	11.0	NTU
G280	Background	E007	10/30/2024	Antimony, total	0.0004 U	mg/L
G280	Background	E007	10/30/2024	Arsenic, total	0.0004 J	mg/L
G280	Background	E007	10/30/2024	Barium, total	0.0484	mg/L
G280	Background	E007	10/30/2024	Beryllium, total	0.0002 U	mg/L
G280	Background	E007	10/30/2024	Boron, total	0.0092 U	mg/L
G280	Background	E007	10/30/2024	Cadmium, total	0.0002 U	mg/L
G280	Background	E007	10/30/2024	Calcium, total	83.2	mg/L
G280	Background	E007	10/30/2024	Chloride, total	65.7	mg/L
G280	Background	E007	10/30/2024	Chromium, total	0.0009 J	mg/L
G280	Background	E007	10/30/2024	Cobalt, total	0.0003 J	mg/L
G280	Background	E007	10/30/2024	Dissolved Oxygen	0.580	mg/L
G280	Background	E007	10/30/2024	Fluoride, total	0.2 U	mg/L
G280	Background	E007	10/30/2024	Lead, total	0.0006 U	mg/L
G280	Background	E007	10/30/2024	Lithium, total	0.00420	mg/L
G280	Background	E007	10/30/2024	Mercury, total	0.00006 U	mg/L
G280	Background	E007	10/30/2024	Molybdenum, total	0.0009 J	mg/L
G280	Background	E007	10/30/2024	Oxidation Reduction Potential	6.00	mV
G280	Background	E007	10/30/2024	pH (field)	7.1	SU
G280	Background	E007	10/30/2024	Radium 226 + Radium 228, total	0.0509	pCi/L
G280	Background	E007	10/30/2024	Selenium, total	0.0006 U	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G280	Background	E007	10/30/2024	Specific Conductance @ 25C (field)	791	micromhos/cm
G280	Background	E007	10/30/2024	Sulfate, total	83.8	mg/L
G280	Background	E007	10/30/2024	Temperature	19.2	degrees C
G280	Background	E007	10/30/2024	Thallium, total	0.001 U	mg/L
G280	Background	E007	10/30/2024	Total Dissolved Solids	552	mg/L
G280	Background	E007	10/30/2024	Turbidity, field	99.0	NTU
G271	Compliance	E007	10/31/2024	Antimony, total	0.00130	mg/L
G271	Compliance	E007	10/31/2024	Arsenic, total	0.0005 J	mg/L
G271	Compliance	E007	10/31/2024	Barium, total	0.0227	mg/L
G271	Compliance	E007	10/31/2024	Beryllium, total	0.0002 U	mg/L
G271	Compliance	E007	10/31/2024	Boron, total	0.490	mg/L
G271	Compliance	E007	10/31/2024	Cadmium, total	0.0002 U	mg/L
G271	Compliance	E007	10/31/2024	Calcium, total	66.8	mg/L
G271	Compliance	E007	10/31/2024	Chloride, total	39.4	mg/L
G271	Compliance	E007	10/31/2024	Chromium, total	0.00390	mg/L
G271	Compliance	E007	10/31/2024	Cobalt, total	0.0002 J	mg/L
G271	Compliance	E007	10/31/2024	Dissolved Oxygen	4.05	mg/L
G271	Compliance	E007	10/31/2024	Fluoride, total	0.32 J	mg/L
G271	Compliance	E007	10/31/2024	Lead, total	0.0006 U	mg/L
G271	Compliance	E007	10/31/2024	Lithium, total	0.0026 J	mg/L
G271	Compliance	E007	10/31/2024	Mercury, total	0.00006 U	mg/L
G271	Compliance	E007	10/31/2024	Molybdenum, total	0.0012 J	mg/L
G271	Compliance	E007	10/31/2024	Oxidation Reduction Potential	63.0	mV
G271	Compliance	E007	10/31/2024	pH (field)	6.9	SU
G271	Compliance	E007	10/31/2024	Radium 226 + Radium 228, total	0.107	pCi/L
G271	Compliance	E007	10/31/2024	Selenium, total	0.00150	mg/L
G271	Compliance	E007	10/31/2024	Specific Conductance @ 25C (field)	847	micromhos/cm
G271	Compliance	E007	10/31/2024	Sulfate, total	160	mg/L
G271	Compliance	E007	10/31/2024	Temperature	17.5	degrees C
G271	Compliance	E007	10/31/2024	Thallium, total	0.001 U	mg/L
G271	Compliance	E007	10/31/2024	Total Dissolved Solids	658	mg/L
G271	Compliance	E007	10/31/2024	Turbidity, field	73.0	NTU
G273	Compliance	E007	10/31/2024	Antimony, total	0.0004 U	mg/L
G273	Compliance	E007	10/31/2024	Arsenic, total	0.0006 J	mg/L
G273	Compliance	E007	10/31/2024	Barium, total	0.0298	mg/L
G273	Compliance	E007	10/31/2024	Beryllium, total	0.0002 U	mg/L
G273	Compliance	E007	10/31/2024	Boron, total	0.0345	mg/L
G273	Compliance	E007	10/31/2024	Cadmium, total	0.0002 U	mg/L
G273	Compliance	E007	10/31/2024	Calcium, total	147	mg/L
G273	Compliance	E007	10/31/2024	Chloride, total	70.7	mg/L
G273	Compliance	E007	10/31/2024	Chromium, total	0.0007 J	mg/L
G273	Compliance	E007	10/31/2024	Cobalt, total	0.0002 J	mg/L
G273	Compliance	E007	10/31/2024	Dissolved Oxygen	0.590	mg/L
G273	Compliance	E007	10/31/2024	Fluoride, total	0.2 U	mg/L
G273	Compliance	E007	10/31/2024	Lead, total	0.0006 U	mg/L
G273	Compliance	E007	10/31/2024	Lithium, total	0.00760	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G273	Compliance	E007	10/31/2024	Mercury, total	0.00006 U	mg/L
G273	Compliance	E007	10/31/2024	Molybdenum, total	0.001 J	mg/L
G273	Compliance	E007	10/31/2024	Oxidation Reduction Potential	-25.0	mV
G273	Compliance	E007	10/31/2024	pH (field)	6.7	SU
G273	Compliance	E007	10/31/2024	Radium 226 + Radium 228, total	0.344	pCi/L
G273	Compliance	E007	10/31/2024	Selenium, total	0.0006 U	mg/L
G273	Compliance	E007	10/31/2024	Specific Conductance @ 25C (field)	1,360	micromhos/cm
G273	Compliance	E007	10/31/2024	Sulfate, total	406	mg/L
G273	Compliance	E007	10/31/2024	Temperature	17.6	degrees C
G273	Compliance	E007	10/31/2024	Thallium, total	0.001 U	mg/L
G273	Compliance	E007	10/31/2024	Total Dissolved Solids	948	mg/L
G273	Compliance	E007	10/31/2024	Turbidity, field	140	NTU
G275	Compliance	E007	10/30/2024	Antimony, total	0.00100 J+	mg/L
G275	Compliance	E007	10/30/2024	Arsenic, total	0.00710	mg/L
G275	Compliance	E007	10/30/2024	Barium, total	0.177	mg/L
G275	Compliance	E007	10/30/2024	Beryllium, total	0.0002 U	mg/L
G275	Compliance	E007	10/30/2024	Boron, total	2.53	mg/L
G275	Compliance	E007	10/30/2024	Cadmium, total	0.0002 U	mg/L
G275	Compliance	E007	10/30/2024	Calcium, total	160	mg/L
G275	Compliance	E007	10/30/2024	Chloride, total	15.7	mg/L
G275	Compliance	E007	10/30/2024	Chromium, total	0.00230	mg/L
G275	Compliance	E007	10/30/2024	Cobalt, total	0.0004 J	mg/L
G275	Compliance	E007	10/30/2024	Dissolved Oxygen	0.930	mg/L
G275	Compliance	E007	10/30/2024	Fluoride, total	0.3 J	mg/L
G275	Compliance	E007	10/30/2024	Lead, total	0.0006 U	mg/L
G275	Compliance	E007	10/30/2024	Lithium, total	0.00830	mg/L
G275	Compliance	E007	10/30/2024	Mercury, total	0.00006 U	mg/L
G275	Compliance	E007	10/30/2024	Molybdenum, total	0.0013 J	mg/L
G275	Compliance	E007	10/30/2024	Oxidation Reduction Potential	5.00	mV
G275	Compliance	E007	10/30/2024	pH (field)	6.6	SU
G275	Compliance	E007	10/30/2024	Radium 226 + Radium 228, total	0.278	pCi/L
G275	Compliance	E007	10/30/2024	Selenium, total	0.0006 U	mg/L
G275	Compliance	E007	10/30/2024	Specific Conductance @ 25C (field)	1,250	micromhos/cm
G275	Compliance	E007	10/30/2024	Sulfate, total	252	mg/L
G275	Compliance	E007	10/30/2024	Temperature	19.2	degrees C
G275	Compliance	E007	10/30/2024	Thallium, total	0.001 U	mg/L
G275	Compliance	E007	10/30/2024	Total Dissolved Solids	904	mg/L
G275	Compliance	E007	10/30/2024	Turbidity, field	7.30	NTU
G275D	Compliance	E007	10/30/2024	Antimony, total	0.0009 J	mg/L
G275D	Compliance	E007	10/30/2024	Arsenic, total	0.0270	mg/L
G275D	Compliance	E007	10/30/2024	Barium, total	0.612	mg/L
G275D	Compliance	E007	10/30/2024	Beryllium, total	0.0002 U	mg/L
G275D	Compliance	E007	10/30/2024	Boron, total	0.217	mg/L
G275D	Compliance	E007	10/30/2024	Cadmium, total	0.0002 U	mg/L
G275D	Compliance	E007	10/30/2024	Calcium, total	152	mg/L
G275D	Compliance	E007	10/30/2024	Chloride, total	15.3	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G275D	Compliance	E007	10/30/2024	Chromium, total	0.0007 U	mg/L
G275D	Compliance	E007	10/30/2024	Cobalt, total	0.0006 J	mg/L
G275D	Compliance	E007	10/30/2024	Dissolved Oxygen	2.44	mg/L
G275D	Compliance	E007	10/30/2024	Fluoride, total	0.33 J	mg/L
G275D	Compliance	E007	10/30/2024	Lead, total	0.0006 U	mg/L
G275D	Compliance	E007	10/30/2024	Lithium, total	0.00380	mg/L
G275D	Compliance	E007	10/30/2024	Mercury, total	0.00006 U	mg/L
G275D	Compliance	E007	10/30/2024	Molybdenum, total	0.0011 J	mg/L
G275D	Compliance	E007	10/30/2024	Oxidation Reduction Potential	-144	mV
G275D	Compliance	E007	10/30/2024	pH (field)	6.8	SU
G275D	Compliance	E007	10/30/2024	Radium 226 + Radium 228, total	0.67	pCi/L
G275D	Compliance	E007	10/30/2024	Selenium, total	0.0006 U	mg/L
G275D	Compliance	E007	10/30/2024	Specific Conductance @ 25C (field)	1,360	micromhos/cm
G275D	Compliance	E007	10/30/2024	Sulfate, total	98.9	mg/L
G275D	Compliance	E007	10/30/2024	Temperature	17.3	degrees C
G275D	Compliance	E007	10/30/2024	Thallium, total	0.001 U	mg/L
G275D	Compliance	E007	10/30/2024	Total Dissolved Solids	855	mg/L
G275D	Compliance	E007	10/30/2024	Turbidity, field	7.50	NTU
G276	Compliance	E007	11/04/2024	Antimony, total	0.0004 U	mg/L
G276	Compliance	E007	11/04/2024	Arsenic, total	0.0004 U	mg/L
G276	Compliance	E007	11/04/2024	Barium, total	0.0664	mg/L
G276	Compliance	E007	11/04/2024	Beryllium, total	0.0002 U	mg/L
G276	Compliance	E007	11/04/2024	Boron, total	0.0495	mg/L
G276	Compliance	E007	11/04/2024	Cadmium, total	0.0002 U	mg/L
G276	Compliance	E007	11/04/2024	Calcium, total	163	mg/L
G276	Compliance	E007	11/04/2024	Chloride, total	40.7	mg/L
G276	Compliance	E007	11/04/2024	Chromium, total	0.00400	mg/L
G276	Compliance	E007	11/04/2024	Cobalt, total	0.0002 J	mg/L
G276	Compliance	E007	11/04/2024	Dissolved Oxygen	3.55	mg/L
G276	Compliance	E007	11/04/2024	Fluoride, total	0.27 J	mg/L
G276	Compliance	E007	11/04/2024	Lead, total	0.0006 U	mg/L
G276	Compliance	E007	11/04/2024	Lithium, total	0.0119	mg/L
G276	Compliance	E007	11/04/2024	Mercury, total	0.00006 U	mg/L
G276	Compliance	E007	11/04/2024	Molybdenum, total	0.0006 J	mg/L
G276	Compliance	E007	11/04/2024	Oxidation Reduction Potential	110	mV
G276	Compliance	E007	11/04/2024	pH (field)	6.8	SU
G276	Compliance	E007	11/04/2024	Radium 226 + Radium 228, total	0.0297	pCi/L
G276	Compliance	E007	11/04/2024	Selenium, total	0.0006 U	mg/L
G276	Compliance	E007	11/04/2024	Specific Conductance @ 25C (field)	1,210	micromhos/cm
G276	Compliance	E007	11/04/2024	Sulfate, total	272	mg/L
G276	Compliance	E007	11/04/2024	Temperature	17.3	degrees C
G276	Compliance	E007	11/04/2024	Thallium, total	0.001 U	mg/L
G276	Compliance	E007	11/04/2024	Total Dissolved Solids	960	mg/L
G276	Compliance	E007	11/04/2024	Turbidity, field	1 U	NTU
G277	Compliance	E007	--	Antimony, total	NS ⁷	mg/L
G277	Compliance	E007	--	Arsenic, total	NS ⁷	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G277	Compliance	E007	--	Barium, total	NS ⁷	mg/L
G277	Compliance	E007	--	Beryllium, total	NS ⁷	mg/L
G277	Compliance	E007	--	Boron, total	NS ⁷	mg/L
G277	Compliance	E007	--	Cadmium, total	NS ⁷	mg/L
G277	Compliance	E007	--	Calcium, total	NS ⁷	mg/L
G277	Compliance	E007	--	Chloride, total	NS ⁷	mg/L
G277	Compliance	E007	--	Chromium, total	NS ⁷	mg/L
G277	Compliance	E007	--	Cobalt, total	NS ⁷	mg/L
G277	Compliance	E007	--	Dissolved Oxygen	NS ⁷	mg/L
G277	Compliance	E007	--	Fluoride, total	NS ⁷	mg/L
G277	Compliance	E007	--	Lead, total	NS ⁷	mg/L
G277	Compliance	E007	--	Lithium, total	NS ⁷	mg/L
G277	Compliance	E007	--	Mercury, total	NS ⁷	mg/L
G277	Compliance	E007	--	Molybdenum, total	NS ⁷	mg/L
G277	Compliance	E007	--	Oxidation Reduction Potential	NS ⁷	mV
G277	Compliance	E007	--	pH (field)	NS ⁷	SU
G277	Compliance	E007	--	Radium 226 + Radium 228, total	NS ⁷	pCi/L
G277	Compliance	E007	--	Selenium, total	NS ⁷	mg/L
G277	Compliance	E007	--	Specific Conductance @ 25C (field)	NS ⁷	micromhos/cm
G277	Compliance	E007	--	Sulfate, total	NS ⁷	mg/L
G277	Compliance	E007	--	Temperature	NS ⁷	degrees C
G277	Compliance	E007	--	Thallium, total	NS ⁷	mg/L
G277	Compliance	E007	--	Total Dissolved Solids	NS ⁷	mg/L
G277	Compliance	E007	--	Turbidity, field	NS ⁷	NTU
G279	Compliance	E007	10/30/2024	Antimony, total	0.0004 U	mg/L
G279	Compliance	E007	10/30/2024	Arsenic, total	0.0008 J	mg/L
G279	Compliance	E007	10/30/2024	Barium, total	0.0304	mg/L
G279	Compliance	E007	10/30/2024	Beryllium, total	0.0002 U	mg/L
G279	Compliance	E007	10/30/2024	Boron, total	6.01	mg/L
G279	Compliance	E007	10/30/2024	Cadmium, total	0.0003 J	mg/L
G279	Compliance	E007	10/30/2024	Calcium, total	494	mg/L
G279	Compliance	E007	10/30/2024	Chloride, total	547	mg/L
G279	Compliance	E007	10/30/2024	Chromium, total	0.00760	mg/L
G279	Compliance	E007	10/30/2024	Cobalt, total	0.0003 J	mg/L
G279	Compliance	E007	10/30/2024	Dissolved Oxygen	0.570	mg/L
G279	Compliance	E007	10/30/2024	Fluoride, total	0.21 J	mg/L
G279	Compliance	E007	10/30/2024	Lead, total	0.0006 U	mg/L
G279	Compliance	E007	10/30/2024	Lithium, total	0.0234	mg/L
G279	Compliance	E007	10/30/2024	Mercury, total	0.00006 U	mg/L
G279	Compliance	E007	10/30/2024	Molybdenum, total	0.0007 J	mg/L
G279	Compliance	E007	10/30/2024	Oxidation Reduction Potential	123	mV
G279	Compliance	E007	10/30/2024	pH (field)	6.5	SU
G279	Compliance	E007	10/30/2024	Radium 226 + Radium 228, total	0.135	pCi/L
G279	Compliance	E007	10/30/2024	Selenium, total	0.00270	mg/L
G279	Compliance	E007	10/30/2024	Specific Conductance @ 25C (field)	5,890	micromhos/cm
G279	Compliance	E007	10/30/2024	Sulfate, total	3,310	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G279	Compliance	E007	10/30/2024	Temperature	18.4	degrees C
G279	Compliance	E007	10/30/2024	Thallium, total	0.001 U	mg/L
G279	Compliance	E007	10/30/2024	Total Dissolved Solids	3,860	mg/L
G279	Compliance	E007	10/30/2024	Turbidity, field	4.30	NTU
G283	Compliance	E007	11/07/2024	Antimony, total	0.0004 U	mg/L
G283	Compliance	E007	11/07/2024	Arsenic, total	0.0004 U	mg/L
G283	Compliance	E007	11/07/2024	Barium, total	0.157	mg/L
G283	Compliance	E007	11/07/2024	Beryllium, total	0.0002 U	mg/L
G283	Compliance	E007	11/07/2024	Boron, total	0.149	mg/L
G283	Compliance	E007	11/07/2024	Cadmium, total	0.0002 U	mg/L
G283	Compliance	E007	11/07/2024	Calcium, total	133	mg/L
G283	Compliance	E007	11/07/2024	Chloride, total	38.1	mg/L
G283	Compliance	E007	11/07/2024	Chromium, total	0.0007 U	mg/L
G283	Compliance	E007	11/07/2024	Cobalt, total	0.0001 U	mg/L
G283	Compliance	E007	11/07/2024	Dissolved Oxygen	0.700	mg/L
G283	Compliance	E007	11/07/2024	Fluoride, total	0.36 J	mg/L
G283	Compliance	E007	11/07/2024	Lead, total	0.0006 U	mg/L
G283	Compliance	E007	11/07/2024	Lithium, total	0.0123	mg/L
G283	Compliance	E007	11/07/2024	Mercury, total	0.00006 U	mg/L
G283	Compliance	E007	11/07/2024	Molybdenum, total	0.00300	mg/L
G283	Compliance	E007	11/07/2024	Oxidation Reduction Potential	-23.0	mV
G283	Compliance	E007	11/07/2024	pH (field)	6.8	SU
G283	Compliance	E007	11/07/2024	Radium 226 + Radium 228, total	1.11	pCi/L
G283	Compliance	E007	11/07/2024	Selenium, total	0.0006 U	mg/L
G283	Compliance	E007	11/07/2024	Specific Conductance @ 25C (field)	1,230	micromhos/cm
G283	Compliance	E007	11/07/2024	Sulfate, total	267	mg/L
G283	Compliance	E007	11/07/2024	Temperature	16.7	degrees C
G283	Compliance	E007	11/07/2024	Thallium, total	0.001 U	mg/L
G283	Compliance	E007	11/07/2024	Total Dissolved Solids	920	mg/L
G283	Compliance	E007	11/07/2024	Turbidity, field	12.0	NTU
G284	Compliance	E007	10/31/2024	Antimony, total	0.0004 U	mg/L
G284	Compliance	E007	10/31/2024	Arsenic, total	0.0005 J	mg/L
G284	Compliance	E007	10/31/2024	Barium, total	0.0619	mg/L
G284	Compliance	E007	10/31/2024	Beryllium, total	0.0002 U	mg/L
G284	Compliance	E007	10/31/2024	Boron, total	0.0450	mg/L
G284	Compliance	E007	10/31/2024	Cadmium, total	0.0002 U	mg/L
G284	Compliance	E007	10/31/2024	Calcium, total	70.6	mg/L
G284	Compliance	E007	10/31/2024	Chloride, total	27.8	mg/L
G284	Compliance	E007	10/31/2024	Chromium, total	0.00210	mg/L
G284	Compliance	E007	10/31/2024	Cobalt, total	0.0003 J	mg/L
G284	Compliance	E007	10/31/2024	Dissolved Oxygen	2.30	mg/L
G284	Compliance	E007	10/31/2024	Fluoride, total	0.41 J	mg/L
G284	Compliance	E007	10/31/2024	Lead, total	0.0006 U	mg/L
G284	Compliance	E007	10/31/2024	Lithium, total	0.00900	mg/L
G284	Compliance	E007	10/31/2024	Mercury, total	0.00006 U	mg/L
G284	Compliance	E007	10/31/2024	Molybdenum, total	0.0168	mg/L

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

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G284	Compliance	E007	10/31/2024	Oxidation Reduction Potential	63.0	mV
G284	Compliance	E007	10/31/2024	pH (field)	6.8	SU
G284	Compliance	E007	10/31/2024	Radium 226 + Radium 228, total	0.218	pCi/L
G284	Compliance	E007	10/31/2024	Selenium, total	0.0007 J	mg/L
G284	Compliance	E007	10/31/2024	Specific Conductance @ 25C (field)	700	micromhos/cm
G284	Compliance	E007	10/31/2024	Sulfate, total	59.7	mg/L
G284	Compliance	E007	10/31/2024	Temperature	18.0	degrees C
G284	Compliance	E007	10/31/2024	Thallium, total	0.001 U	mg/L
G284	Compliance	E007	10/31/2024	Total Dissolved Solids	470	mg/L
G284	Compliance	E007	10/31/2024	Turbidity, field	26.0	NTU
G285	Compliance	E007	10/29/2024	Antimony, total	0.0004 U	mg/L
G285	Compliance	E007	10/29/2024	Arsenic, total	0.00140	mg/L
G285	Compliance	E007	10/29/2024	Barium, total	0.0616	mg/L
G285	Compliance	E007	10/29/2024	Beryllium, total	0.0002 U	mg/L
G285	Compliance	E007	10/29/2024	Boron, total	0.130	mg/L
G285	Compliance	E007	10/29/2024	Cadmium, total	0.0002 U	mg/L
G285	Compliance	E007	10/29/2024	Calcium, total	231	mg/L
G285	Compliance	E007	10/29/2024	Chloride, total	28.2	mg/L
G285	Compliance	E007	10/29/2024	Chromium, total	0.001 J	mg/L
G285	Compliance	E007	10/29/2024	Cobalt, total	0.00910	mg/L
G285	Compliance	E007	10/29/2024	Dissolved Oxygen	0.520	mg/L
G285	Compliance	E007	10/29/2024	Fluoride, total	0.2 U	mg/L
G285	Compliance	E007	10/29/2024	Lead, total	0.0006 U	mg/L
G285	Compliance	E007	10/29/2024	Lithium, total	0.00730	mg/L
G285	Compliance	E007	10/29/2024	Mercury, total	0.00006 U	mg/L
G285	Compliance	E007	10/29/2024	Molybdenum, total	0.00430	mg/L
G285	Compliance	E007	10/29/2024	Oxidation Reduction Potential	-106	mV
G285	Compliance	E007	10/29/2024	pH (field)	6.4	SU
G285	Compliance	E007	10/29/2024	Radium 226 + Radium 228, total	2.55	pCi/L
G285	Compliance	E007	10/29/2024	Selenium, total	0.0006 U	mg/L
G285	Compliance	E007	10/29/2024	Specific Conductance @ 25C (field)	1,900	micromhos/cm
G285	Compliance	E007	10/29/2024	Sulfate, total	664	mg/L
G285	Compliance	E007	10/29/2024	Temperature	17.4	degrees C
G285	Compliance	E007	10/29/2024	Thallium, total	0.001 U	mg/L
G285	Compliance	E007	10/29/2024	Total Dissolved Solids	1,580	mg/L
G285	Compliance	E007	10/29/2024	Turbidity, field	290	NTU

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

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 RECYCLE POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G271	UA	E004	Antimony, total	mg/L	11/23/15 - 02/19/24	25	92	CB around T-S line	0.003	0.006	Standard	No Exceedance
G271	UA	E004	Arsenic, total	mg/L	11/23/15 - 02/19/24	27	77	CI around median	0.001	0.010	Standard	No Exceedance
G271	UA	E004	Barium, total	mg/L	11/23/15 - 02/19/24	28	0	CB around T-S line	0.0157	2.0	Standard	No Exceedance
G271	UA	E004	Beryllium, total	mg/L	11/23/15 - 02/19/24	25	97	CI around median	0.001	0.004	Standard	No Exceedance
G271	UA	E004	Boron, total	mg/L	11/23/15 - 02/19/24	29	0	CI around geomean	0.681	2	Standard	No Exceedance
G271	UA	E004	Cadmium, total	mg/L	11/23/15 - 02/19/24	25	98	CI around median	0.001	0.005	Standard	No Exceedance
G271	UA	E004	Chloride, total	mg/L	11/23/15 - 02/19/24	29	0	CB around linear reg	46.1	200	Standard	No Exceedance
G271	UA	E004	Chromium, total	mg/L	11/23/15 - 02/19/24	27	80	CI around median	0.004	0.1	Standard	No Exceedance
G271	UA	E004	Cobalt, total	mg/L	11/23/15 - 02/19/24	27	87	CB around T-S line	0.00194	0.006	Standard	No Exceedance
G271	UA	E004	Fluoride, total	mg/L	11/23/15 - 02/19/24	29	7	CI around mean	0.333	4.0	Standard	No Exceedance
G271	UA	E004	Lead, total	mg/L	11/23/15 - 02/19/24	28	61	CI around median	0.001	0.0120	Background	No Exceedance
G271	UA	E004	Lithium, total	mg/L	11/23/15 - 02/19/24	23	91	CI around median	0.01	0.04	Standard	No Exceedance
G271	UA	E004	Mercury, total	mg/L	11/23/15 - 02/19/24	25	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G271	UA	E004	Molybdenum, total	mg/L	11/23/15 - 02/19/24	28	70	CI around median	0.001	0.1	Standard	No Exceedance
G271	UA	E004	pH (field)	SU	11/23/15 - 02/19/24	31	0	CI around mean	7.1/7.3	6.5/9.0	Standard/Standard	No Exceedance
G271	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/23/15 - 02/19/24	23	0	CI around geomean	0.384	5	Standard	No Exceedance
G271	UA	E004	Selenium, total	mg/L	11/23/15 - 02/19/24	27	8	CI around mean	0.00149	0.05	Standard	No Exceedance
G271	UA	E004	Sulfate, total	mg/L	11/23/15 - 02/19/24	29	0	CB around T-S line	182	400	Standard	No Exceedance
G271	UA	E004	Thallium, total	mg/L	11/23/15 - 02/19/24	26	97	CI around median	0.001	0.002	Standard	No Exceedance
G271	UA	E004	Total Dissolved Solids	mg/L	11/23/15 - 02/19/24	29	0	CB around linear reg	637	1,200	Standard	No Exceedance
G273	UA	E004	Antimony, total	mg/L	11/24/15 - 02/19/24	25	95	CB around T-S line	0.003	0.006	Standard	No Exceedance
G273	UA	E004	Arsenic, total	mg/L	11/24/15 - 02/19/24	28	85	CI around median	0.001	0.010	Standard	No Exceedance
G273	UA	E004	Barium, total	mg/L	11/24/15 - 02/19/24	28	0	CI around median	0.029	2.0	Standard	No Exceedance
G273	UA	E004	Beryllium, total	mg/L	11/24/15 - 02/19/24	25	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G273	UA	E004	Boron, total	mg/L	11/24/15 - 02/19/24	29	6	CB around T-S line	-0.0583	2	Standard	No Exceedance
G273	UA	E004	Cadmium, total	mg/L	11/24/15 - 02/19/24	25	98	CI around median	0.001	0.005	Standard	No Exceedance
G273	UA	E004	Chloride, total	mg/L	11/24/15 - 02/19/24	29	0	CB around T-S line	69.9	200	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G273	UA	E004	Chromium, total	mg/L	11/24/15 - 02/19/24	27	97	CB around T-S line	0.004	0.1	Standard	No Exceedance
G273	UA	E004	Cobalt, total	mg/L	11/24/15 - 02/19/24	27	97	CB around T-S line	0.00197	0.006	Standard	No Exceedance
G273	UA	E004	Fluoride, total	mg/L	11/24/15 - 02/19/24	29	17	CI around mean	0.302	4.0	Standard	No Exceedance
G273	UA	E004	Lead, total	mg/L	11/24/15 - 02/19/24	28	89	CI around median	0.001	0.0120	Background	No Exceedance
G273	UA	E004	Lithium, total	mg/L	11/24/15 - 02/19/24	23	78	CI around median	0.01	0.04	Standard	No Exceedance
G273	UA	E004	Mercury, total	mg/L	11/24/15 - 02/19/24	25	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G273	UA	E004	Molybdenum, total	mg/L	11/24/15 - 02/19/24	28	90	CI around median	0.001	0.1	Standard	No Exceedance
G273	UA	E004	pH (field)	SU	11/24/15 - 02/19/24	31	0	CI around mean	7.0/7.1	6.5/9.0	Standard/Standard	No Exceedance
G273	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 02/19/24	23	0	CI around median	0.226	5	Standard	No Exceedance
G273	UA	E004	Selenium, total	mg/L	11/24/15 - 02/19/24	28	95	CI around median	0.001	0.05	Standard	No Exceedance
G273	UA	E004	Sulfate, total	mg/L	11/24/15 - 02/19/24	29	0	CI around median	410	400	Standard	Exceedance
G273	UA	E004	Thallium, total	mg/L	11/24/15 - 02/19/24	26	95	CI around median	0.001	0.002	Standard	No Exceedance
G273	UA	E004	Total Dissolved Solids	mg/L	11/24/15 - 02/19/24	29	0	CB around linear reg	1,020	1,200	Standard	No Exceedance
G275	UA	E004	Antimony, total	mg/L	10/14/20 - 02/19/24	10	95	CI around median	0.003	0.006	Standard	No Exceedance
G275	UA	E004	Arsenic, total	mg/L	10/14/20 - 02/19/24	10	56	CI around median	0.001	0.010	Standard	No Exceedance
G275	UA	E004	Barium, total	mg/L	10/14/20 - 02/19/24	10	0	CI around geomean	0.024	2.0	Standard	No Exceedance
G275	UA	E004	Beryllium, total	mg/L	10/14/20 - 02/19/24	10	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G275	UA	E004	Boron, total	mg/L	10/14/20 - 02/19/24	10	0	CI around mean	1.51	2	Standard	No Exceedance
G275	UA	E004	Cadmium, total	mg/L	10/14/20 - 02/19/24	10	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G275	UA	E004	Chloride, total	mg/L	10/14/20 - 02/19/24	10	0	CI around mean	17.6	200	Standard	No Exceedance
G275	UA	E004	Chromium, total	mg/L	10/14/20 - 02/19/24	10	90	CI around median	0.004	0.1	Standard	No Exceedance
G275	UA	E004	Cobalt, total	mg/L	10/14/20 - 02/19/24	10	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G275	UA	E004	Fluoride, total	mg/L	10/14/20 - 02/19/24	10	10	CI around mean	0.26	4.0	Standard	No Exceedance
G275	UA	E004	Lead, total	mg/L	10/14/20 - 02/19/24	10	59	Most recent sample	0.001	0.0120	Background	No Exceedance
G275	UA	E004	Lithium, total	mg/L	06/08/23 - 02/19/24	2	50	Most recent sample	0.0093	0.04	Standard	No Exceedance
G275	UA	E004	Mercury, total	mg/L	10/14/20 - 02/19/24	10	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G275	UA	E004	Molybdenum, total	mg/L	10/14/20 - 02/19/24	10	91	CI around median	0.001	0.1	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G275	UA	E004	pH (field)	SU	10/14/20 - 02/19/24	10	0	CI around mean	6.9/7.1	6.5/9.0	Standard/Standard	No Exceedance
G275	UA	E004	Radium 226 + Radium 228, total	pCi/L	06/08/23 - 02/19/24	2	0	Most recent sample	0.0508	5	Standard	No Exceedance
G275	UA	E004	Selenium, total	mg/L	10/14/20 - 02/19/24	10	84	Most recent sample	0.001	0.05	Standard	No Exceedance
G275	UA	E004	Sulfate, total	mg/L	10/14/20 - 02/19/24	10	0	CB around linear reg	185	400	Standard	No Exceedance
G275	UA	E004	Thallium, total	mg/L	10/14/20 - 02/19/24	10	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G275	UA	E004	Total Dissolved Solids	mg/L	10/14/20 - 02/19/24	10	0	CI around mean	927	1,200	Standard	No Exceedance
G275D	DA	E004	Antimony, total	mg/L	03/30/21 - 02/19/24	9	89	CI around median	0.001	0.006	Standard	No Exceedance
G275D	DA	E004	Arsenic, total	mg/L	03/30/21 - 02/19/24	9	0	CB around linear reg	0.0147	0.010	Standard	Exceedance
G275D	DA	E004	Barium, total	mg/L	03/30/21 - 02/19/24	9	0	CI around mean	0.322	2.0	Standard	No Exceedance
G275D	DA	E004	Beryllium, total	mg/L	03/30/21 - 02/19/24	9	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G275D	DA	E004	Boron, total	mg/L	03/30/21 - 02/19/24	9	0	CI around geomean	0.195	2	Standard	No Exceedance
G275D	DA	E004	Cadmium, total	mg/L	03/30/21 - 02/19/24	9	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G275D	DA	E004	Chloride, total	mg/L	03/30/21 - 02/19/24	9	0	CI around mean	20	200	Standard	No Exceedance
G275D	DA	E004	Chromium, total	mg/L	03/30/21 - 02/19/24	9	78	CI around median	0.0015	0.1	Standard	No Exceedance
G275D	DA	E004	Cobalt, total	mg/L	03/30/21 - 02/19/24	9	67	CB around T-S line	-0.00687	0.006	Standard	No Exceedance
G275D	DA	E004	Fluoride, total	mg/L	03/30/21 - 02/19/24	9	0	CI around mean	0.391	4.0	Standard	No Exceedance
G275D	DA	E004	Lead, total	mg/L	03/30/21 - 02/19/24	9	89	CI around median	0.001	0.0120	Background	No Exceedance
G275D	DA	E004	Lithium, total	mg/L	03/30/21 - 02/19/24	9	78	CI around median	0.0035	0.04	Standard	No Exceedance
G275D	DA	E004	Mercury, total	mg/L	03/30/21 - 02/19/24	9	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G275D	DA	E004	Molybdenum, total	mg/L	03/30/21 - 02/19/24	9	11	CB around linear reg	-0.00861	0.1	Standard	No Exceedance
G275D	DA	E004	pH (field)	SU	03/30/21 - 02/19/24	9	0	CI around mean	7.0/7.3	6.5/9.0	Standard/Standard	No Exceedance
G275D	DA	E004	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 02/19/24	10	0	CI around mean	0.53	5	Standard	No Exceedance
G275D	DA	E004	Selenium, total	mg/L	03/30/21 - 02/19/24	9	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G275D	DA	E004	Sulfate, total	mg/L	03/30/21 - 02/19/24	9	0	CB around linear reg	54.5	400	Standard	No Exceedance
G275D	DA	E004	Thallium, total	mg/L	03/30/21 - 02/19/24	9	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G275D	DA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/19/24	9	0	CI around median	840	1,200	Standard	No Exceedance
G276	UA	E004	Antimony, total	mg/L	11/24/15 - 02/20/24	25	97	CB around T-S line	0.00242	0.006	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G276	UA	E004	Arsenic, total	mg/L	11/24/15 - 02/20/24	28	84	CI around median	0.001	0.010	Standard	No Exceedance
G276	UA	E004	Barium, total	mg/L	11/24/15 - 02/20/24	28	0	CB around T-S line	0.0323	2.0	Standard	No Exceedance
G276	UA	E004	Beryllium, total	mg/L	11/24/15 - 02/20/24	25	94	Most recent sample	0.001	0.004	Standard	No Exceedance
G276	UA	E004	Boron, total	mg/L	11/24/15 - 02/20/24	29	12	CI around geomean	0.0173	2	Standard	No Exceedance
G276	UA	E004	Cadmium, total	mg/L	11/24/15 - 02/20/24	25	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G276	UA	E004	Chloride, total	mg/L	11/24/15 - 02/20/24	29	0	CI around median	22	200	Standard	No Exceedance
G276	UA	E004	Chromium, total	mg/L	11/24/15 - 02/20/24	27	84	CI around median	0.004	0.1	Standard	No Exceedance
G276	UA	E004	Cobalt, total	mg/L	11/24/15 - 02/20/24	27	97	CB around T-S line	0.002	0.006	Standard	No Exceedance
G276	UA	E004	Fluoride, total	mg/L	11/24/15 - 02/20/24	29	5	CI around median	0.355	4.0	Standard	No Exceedance
G276	UA	E004	Lead, total	mg/L	11/24/15 - 02/20/24	28	78	CI around median	0.001	0.0120	Background	No Exceedance
G276	UA	E004	Lithium, total	mg/L	11/24/15 - 02/20/24	23	44	CI around median	0.012	0.04	Standard	No Exceedance
G276	UA	E004	Mercury, total	mg/L	11/24/15 - 02/20/24	25	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G276	UA	E004	Molybdenum, total	mg/L	11/24/15 - 02/20/24	28	79	CI around median	0.001	0.1	Standard	No Exceedance
G276	UA	E004	pH (field)	SU	11/24/15 - 02/20/24	30	0	CB around linear reg	6.7/7.0	6.5/9.0	Standard/Standard	No Exceedance
G276	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 02/20/24	23	0	CI around geomean	0.371	5	Standard	No Exceedance
G276	UA	E004	Selenium, total	mg/L	11/24/15 - 02/20/24	28	37	CB around linear reg	0.000731	0.05	Standard	No Exceedance
G276	UA	E004	Sulfate, total	mg/L	11/24/15 - 02/20/24	29	0	CB around T-S line	252	400	Standard	No Exceedance
G276	UA	E004	Thallium, total	mg/L	11/24/15 - 02/20/24	26	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G276	UA	E004	Total Dissolved Solids	mg/L	11/24/15 - 02/20/24	29	0	CB around T-S line	853	1,200	Standard	No Exceedance
G277	UA	E004	Antimony, total	mg/L	10/14/20 - 02/20/24	11	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G277	UA	E004	Arsenic, total	mg/L	10/14/20 - 02/20/24	11	59	CI around median	0.001	0.010	Standard	No Exceedance
G277	UA	E004	Barium, total	mg/L	10/14/20 - 02/20/24	11	0	CB around linear reg	0.0122	2.0	Standard	No Exceedance
G277	UA	E004	Beryllium, total	mg/L	10/14/20 - 02/20/24	11	89	Most recent sample	0.001	0.004	Standard	No Exceedance
G277	UA	E004	Boron, total	mg/L	10/14/20 - 02/20/24	11	14	CB around linear reg	0.0978	2	Standard	No Exceedance
G277	UA	E004	Cadmium, total	mg/L	10/14/20 - 02/20/24	11	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G277	UA	E004	Chloride, total	mg/L	10/14/20 - 02/20/24	11	0	CI around mean	63.8	200	Standard	No Exceedance
G277	UA	E004	Chromium, total	mg/L	10/14/20 - 02/20/24	11	56	CI around median	0.004	0.1	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G277	UA	E004	Cobalt, total	mg/L	10/14/20 - 02/20/24	11	78	CI around median	0.002	0.006	Standard	No Exceedance
G277	UA	E004	Fluoride, total	mg/L	10/14/20 - 02/20/24	11	11	CI around median	0.125	4.0	Standard	No Exceedance
G277	UA	E004	Lead, total	mg/L	10/14/20 - 02/20/24	11	55	CI around median	0.001	0.0120	Background	No Exceedance
G277	UA	E004	Lithium, total	mg/L	06/01/23 - 02/20/24	2	50	Most recent sample	0.0094	0.04	Standard	No Exceedance
G277	UA	E004	Mercury, total	mg/L	10/14/20 - 02/20/24	11	94	Most recent sample	0.0002	0.002	Standard	No Exceedance
G277	UA	E004	Molybdenum, total	mg/L	10/14/20 - 02/20/24	11	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G277	UA	E004	pH (field)	SU	10/14/20 - 02/20/24	11	0	CI around mean	6.7/7.1	6.5/9.0	Standard/Standard	No Exceedance
G277	UA	E004	Radium 226 + Radium 228, total	pCi/L	06/01/23 - 02/20/24	2	0	Most recent sample	0.149	5	Standard	No Exceedance
G277	UA	E004	Selenium, total	mg/L	10/14/20 - 02/20/24	11	61	CI around median	0.001	0.05	Standard	No Exceedance
G277	UA	E004	Sulfate, total	mg/L	10/14/20 - 02/20/24	11	0	CB around linear reg	381	400	Standard	No Exceedance
G277	UA	E004	Thallium, total	mg/L	10/14/20 - 02/20/24	11	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G277	UA	E004	Total Dissolved Solids	mg/L	10/14/20 - 02/20/24	11	0	CI around mean	934	1,200	Standard	No Exceedance
G279	UA	E004	Antimony, total	mg/L	11/24/15 - 02/20/24	25	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G279	UA	E004	Arsenic, total	mg/L	11/24/15 - 02/20/24	28	80	CI around median	0.001	0.010	Standard	No Exceedance
G279	UA	E004	Barium, total	mg/L	11/24/15 - 02/20/24	28	0	CB around linear reg	0.0272	2.0	Standard	No Exceedance
G279	UA	E004	Beryllium, total	mg/L	11/24/15 - 02/20/24	25	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G279	UA	E004	Boron, total	mg/L	11/24/15 - 02/20/24	29	20	CB around linear reg	1.23	2	Standard	No Exceedance
G279	UA	E004	Cadmium, total	mg/L	11/24/15 - 02/20/24	25	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G279	UA	E004	Chloride, total	mg/L	11/24/15 - 02/20/24	29	0	CB around linear reg	216	200	Standard	Exceedance
G279	UA	E004	Chromium, total	mg/L	11/24/15 - 02/20/24	27	90	CI around median	0.004	0.1	Standard	No Exceedance
G279	UA	E004	Cobalt, total	mg/L	11/24/15 - 02/20/24	27	87	CI around median	0.002	0.006	Standard	No Exceedance
G279	UA	E004	Fluoride, total	mg/L	11/24/15 - 02/20/24	29	7	CI around mean	0.339	4.0	Standard	No Exceedance
G279	UA	E004	Lead, total	mg/L	11/24/15 - 02/20/24	28	83	CI around median	0.001	0.0120	Background	No Exceedance
G279	UA	E004	Lithium, total	mg/L	11/24/15 - 02/20/24	28	71	CB around T-S line	0.0156	0.04	Standard	No Exceedance
G279	UA	E004	Mercury, total	mg/L	11/24/15 - 02/20/24	25	97	Most recent sample	0.0002	0.002	Standard	No Exceedance
G279	UA	E004	Molybdenum, total	mg/L	11/24/15 - 02/20/24	28	87	CI around median	0.001	0.1	Standard	No Exceedance
G279	UA	E004	pH (field)	SU	11/24/15 - 02/20/24	29	0	CB around linear reg	6.5/6.8	6.5/9.0	Standard/Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G279	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 02/20/24	28	0	CI around mean	0.639	5	Standard	No Exceedance
G279	UA	E004	Selenium, total	mg/L	11/24/15 - 02/20/24	28	20	CB around linear reg	-0.00398	0.05	Standard	No Exceedance
G279	UA	E004	Sulfate, total	mg/L	11/24/15 - 02/20/24	29	0	CI around geomean	408	400	Standard	Exceedance
G279	UA	E004	Thallium, total	mg/L	11/24/15 - 02/20/24	26	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G279	UA	E004	Total Dissolved Solids	mg/L	11/24/15 - 02/20/24	29	0	CB around linear reg	2,680	1,200	Standard	Exceedance
G283	LCU	E004	Antimony, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G283	LCU	E004	Arsenic, total	mg/L	03/31/21 - 02/21/24	12	58	CI around median	0.001	0.010	Standard	No Exceedance
G283	LCU	E004	Barium, total	mg/L	03/31/21 - 02/21/24	12	0	CI around mean	0.161	2.0	Standard	No Exceedance
G283	LCU	E004	Beryllium, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G283	LCU	E004	Boron, total	mg/L	03/31/21 - 02/21/24	12	0	CB around linear reg	0.0439	2	Standard	No Exceedance
G283	LCU	E004	Cadmium, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G283	LCU	E004	Chloride, total	mg/L	03/31/21 - 02/21/24	12	0	CI around mean	37.7	200	Standard	No Exceedance
G283	LCU	E004	Chromium, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G283	LCU	E004	Cobalt, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G283	LCU	E004	Fluoride, total	mg/L	03/31/21 - 02/21/24	12	17	CI around mean	0.303	4.0	Standard	No Exceedance
G283	LCU	E004	Lead, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.001	0.0120	Background	No Exceedance
G283	LCU	E004	Lithium, total	mg/L	03/31/21 - 02/21/24	12	75	CB around T-S line	0.00941	0.04	Standard	No Exceedance
G283	LCU	E004	Mercury, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G283	LCU	E004	Molybdenum, total	mg/L	03/31/21 - 02/21/24	12	0	CI around geomean	0.00157	0.1	Standard	No Exceedance
G283	LCU	E004	pH (field)	SU	03/31/21 - 02/21/24	12	0	CI around mean	7.0/7.1	6.5/9.0	Standard/Standard	No Exceedance
G283	LCU	E004	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 02/21/24	12	0	CI around geomean	0.545	5	Standard	No Exceedance
G283	LCU	E004	Selenium, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G283	LCU	E004	Sulfate, total	mg/L	03/31/21 - 02/21/24	12	0	CI around mean	239	400	Standard	No Exceedance
G283	LCU	E004	Thallium, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G283	LCU	E004	Total Dissolved Solids	mg/L	03/31/21 - 02/21/24	12	0	CI around mean	785	1,200	Standard	No Exceedance
G284	UA	E004	Antimony, total	mg/L	03/30/21 - 02/20/24	11	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G284	UA	E004	Arsenic, total	mg/L	03/30/21 - 02/20/24	11	91	Most recent sample	0.001	0.010	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G284	UA	E004	Barium, total	mg/L	03/30/21 - 02/20/24	11	0	CI around median	0.063	2.0	Standard	No Exceedance
G284	UA	E004	Beryllium, total	mg/L	03/30/21 - 02/20/24	11	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G284	UA	E004	Boron, total	mg/L	03/30/21 - 02/20/24	11	0	CI around geomean	0.0397	2	Standard	No Exceedance
G284	UA	E004	Cadmium, total	mg/L	03/30/21 - 02/20/24	11	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G284	UA	E004	Chloride, total	mg/L	03/30/21 - 02/20/24	11	0	CI around mean	35.5	200	Standard	No Exceedance
G284	UA	E004	Chromium, total	mg/L	03/30/21 - 02/20/24	11	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G284	UA	E004	Cobalt, total	mg/L	03/30/21 - 02/20/24	11	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G284	UA	E004	Fluoride, total	mg/L	03/30/21 - 02/20/24	11	0	CI around mean	0.487	4.0	Standard	No Exceedance
G284	UA	E004	Lead, total	mg/L	03/30/21 - 02/20/24	11	100	All ND - Last	0.001	0.0120	Background	No Exceedance
G284	UA	E004	Lithium, total	mg/L	03/30/21 - 02/20/24	11	82	CI around median	0.0134	0.04	Standard	No Exceedance
G284	UA	E004	Mercury, total	mg/L	03/30/21 - 02/20/24	11	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G284	UA	E004	Molybdenum, total	mg/L	03/30/21 - 02/20/24	11	36	CI around median	0.001	0.1	Standard	No Exceedance
G284	UA	E004	pH (field)	SU	03/30/21 - 02/20/24	11	0	CI around mean	7.1/7.3	6.5/9.0	Standard/Standard	No Exceedance
G284	UA	E004	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 02/20/24	11	0	CI around mean	0.124	5	Standard	No Exceedance
G284	UA	E004	Selenium, total	mg/L	03/30/21 - 02/20/24	11	82	CI around median	0.001	0.05	Standard	No Exceedance
G284	UA	E004	Sulfate, total	mg/L	03/30/21 - 02/20/24	11	0	CI around median	63	400	Standard	No Exceedance
G284	UA	E004	Thallium, total	mg/L	03/30/21 - 02/20/24	11	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G284	UA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/20/24	11	0	CI around mean	445	1,200	Standard	No Exceedance
G285	LCU	E004	Antimony, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G285	LCU	E004	Arsenic, total	mg/L	03/30/21 - 02/20/24	12	67	CI around median	0.001	0.010	Standard	No Exceedance
G285	LCU	E004	Barium, total	mg/L	03/30/21 - 02/20/24	12	0	CB around linear reg	0.0204	2.0	Standard	No Exceedance
G285	LCU	E004	Beryllium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G285	LCU	E004	Boron, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.11	2	Standard	No Exceedance
G285	LCU	E004	Cadmium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G285	LCU	E004	Chloride, total	mg/L	03/30/21 - 02/20/24	12	0	CB around linear reg	2.82	200	Standard	No Exceedance
G285	LCU	E004	Chromium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G285	LCU	E004	Cobalt, total	mg/L	03/30/21 - 02/20/24	12	25	CI around mean	0.0017	0.006	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G285	LCU	E004	Fluoride, total	mg/L	03/30/21 - 02/20/24	12	25	CI around mean	0.276	4.0	Standard	No Exceedance
G285	LCU	E004	Lead, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.0120	Background	No Exceedance
G285	LCU	E004	Lithium, total	mg/L	03/30/21 - 02/20/24	12	75	CI around median	0.0051	0.04	Standard	No Exceedance
G285	LCU	E004	Mercury, total	mg/L	03/30/21 - 02/20/24	12	92	CI around median	0.0002	0.002	Standard	No Exceedance
G285	LCU	E004	Molybdenum, total	mg/L	03/30/21 - 02/20/24	12	0	CB around linear reg	0.000592	0.1	Standard	No Exceedance
G285	LCU	E004	pH (field)	SU	03/30/21 - 02/20/24	12	0	CI around median	6.7/6.9	6.5/9.0	Standard/Standard	No Exceedance
G285	LCU	E004	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 02/20/24	12	0	CI around geomean	1.24	5	Standard	No Exceedance
G285	LCU	E004	Selenium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G285	LCU	E004	Sulfate, total	mg/L	03/30/21 - 02/20/24	12	0	CB around linear reg	586	400	Standard	Exceedance
G285	LCU	E004	Thallium, total	mg/L	03/30/21 - 02/20/24	12	92	CB around T-S line	0.001	0.002	Standard	No Exceedance
G285	LCU	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	1,440	1,200	Standard	Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF RECYCLE 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

LCU = Lower Confining Unit

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 RECYCLE POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G271	UA	E005	Antimony, total	mg/L	11/23/15 - 05/01/24	26	92	CB around T-S line	0.00292	0.006	Standard	No Exceedance
G271	UA	E005	Arsenic, total	mg/L	11/23/15 - 05/01/24	28	78	CI around median	0.001	0.010	Standard	No Exceedance
G271	UA	E005	Barium, total	mg/L	11/23/15 - 05/01/24	29	0	CB around T-S line	0.0152	2.0	Standard	No Exceedance
G271	UA	E005	Beryllium, total	mg/L	11/23/15 - 05/01/24	26	97	CI around median	0.001	0.004	Standard	No Exceedance
G271	UA	E005	Boron, total	mg/L	11/23/15 - 05/01/24	30	0	CI around geomean	0.678	2	Standard	No Exceedance
G271	UA	E005	Cadmium, total	mg/L	11/23/15 - 05/01/24	26	98	CI around median	0.001	0.005	Standard	No Exceedance
G271	UA	E005	Chloride, total	mg/L	11/23/15 - 05/01/24	30	0	CB around linear reg	47.8	200	Standard	No Exceedance
G271	UA	E005	Chromium, total	mg/L	11/23/15 - 05/01/24	28	78	CI around median	0.004	0.1	Standard	No Exceedance
G271	UA	E005	Cobalt, total	mg/L	11/23/15 - 05/01/24	28	88	CB around T-S line	0.00184	0.006	Standard	No Exceedance
G271	UA	E005	Fluoride, total	mg/L	11/23/15 - 05/01/24	30	7	CI around mean	0.335	4.0	Standard	No Exceedance
G271	UA	E005	Lead, total	mg/L	11/23/15 - 05/01/24	29	62	CI around median	0.001	0.0120	Background	No Exceedance
G271	UA	E005	Lithium, total	mg/L	11/23/15 - 05/01/24	24	92	CI around median	0.01	0.04	Standard	No Exceedance
G271	UA	E005	Mercury, total	mg/L	11/23/15 - 05/01/24	26	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G271	UA	E005	Molybdenum, total	mg/L	11/23/15 - 05/01/24	29	71	CI around median	0.001	0.1	Standard	No Exceedance
G271	UA	E005	pH (field)	SU	11/23/15 - 05/01/24	32	0	CI around mean	7.1/7.3	6.5/9.0	Standard/Standard	No Exceedance
G271	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/23/15 - 05/01/24	24	0	CI around geomean	0.383	5	Standard	No Exceedance
G271	UA	E005	Selenium, total	mg/L	11/23/15 - 05/01/24	28	8	CI around mean	0.00149	0.05	Standard	No Exceedance
G271	UA	E005	Sulfate, total	mg/L	11/23/15 - 05/01/24	30	0	CB around T-S line	175	400	Standard	No Exceedance
G271	UA	E005	Thallium, total	mg/L	11/23/15 - 05/01/24	27	97	CI around median	0.001	0.002	Standard	No Exceedance
G271	UA	E005	Total Dissolved Solids	mg/L	11/23/15 - 05/01/24	30	0	CB around linear reg	635	1,200	Standard	No Exceedance
G273	UA	E005	Antimony, total	mg/L	11/24/15 - 05/01/24	26	95	CB around T-S line	0.00254	0.006	Standard	No Exceedance
G273	UA	E005	Arsenic, total	mg/L	11/24/15 - 05/01/24	29	86	CI around median	0.001	0.010	Standard	No Exceedance
G273	UA	E005	Barium, total	mg/L	11/24/15 - 05/01/24	29	0	CI around median	0.029	2.0	Standard	No Exceedance
G273	UA	E005	Beryllium, total	mg/L	11/24/15 - 05/01/24	26	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G273	UA	E005	Boron, total	mg/L	11/24/15 - 05/01/24	30	5	CB around T-S line	-0.0388	2	Standard	No Exceedance
G273	UA	E005	Cadmium, total	mg/L	11/24/15 - 05/01/24	26	98	CI around median	0.001	0.005	Standard	No Exceedance
G273	UA	E005	Chloride, total	mg/L	11/24/15 - 05/01/24	30	0	CB around T-S line	68.8	200	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G273	UA	E005	Chromium, total	mg/L	11/24/15 - 05/01/24	28	95	CB around T-S line	0.004	0.1	Standard	No Exceedance
G273	UA	E005	Cobalt, total	mg/L	11/24/15 - 05/01/24	28	98	CB around T-S line	0.0019	0.006	Standard	No Exceedance
G273	UA	E005	Fluoride, total	mg/L	11/24/15 - 05/01/24	30	17	CI around mean	0.302	4.0	Standard	No Exceedance
G273	UA	E005	Lead, total	mg/L	11/24/15 - 05/01/24	29	89	CI around median	0.001	0.0120	Background	No Exceedance
G273	UA	E005	Lithium, total	mg/L	11/24/15 - 05/01/24	24	75	CI around median	0.01	0.04	Standard	No Exceedance
G273	UA	E005	Mercury, total	mg/L	11/24/15 - 05/01/24	26	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G273	UA	E005	Molybdenum, total	mg/L	11/24/15 - 05/01/24	29	90	CI around median	0.001	0.1	Standard	No Exceedance
G273	UA	E005	pH (field)	SU	11/24/15 - 05/01/24	32	0	CI around mean	7.0/7.1	6.5/9.0	Standard/Standard	No Exceedance
G273	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 05/01/24	24	0	CI around mean	0.361	5	Standard	No Exceedance
G273	UA	E005	Selenium, total	mg/L	11/24/15 - 05/01/24	29	95	CI around median	0.001	0.05	Standard	No Exceedance
G273	UA	E005	Sulfate, total	mg/L	11/24/15 - 05/01/24	30	0	CI around median	410	400	Standard	Exceedance
G273	UA	E005	Thallium, total	mg/L	11/24/15 - 05/01/24	27	95	CI around median	0.001	0.002	Standard	No Exceedance
G273	UA	E005	Total Dissolved Solids	mg/L	11/24/15 - 05/01/24	30	0	CB around linear reg	1,040	1,200	Standard	No Exceedance
G275	UA	E005	Antimony, total	mg/L	10/14/20 - 05/02/24	11	95	CI around median	0.0021	0.006	Standard	No Exceedance
G275	UA	E005	Arsenic, total	mg/L	10/14/20 - 05/02/24	11	54	CI around median	0.001	0.010	Standard	No Exceedance
G275	UA	E005	Barium, total	mg/L	10/14/20 - 05/02/24	11	0	CI around geomean	0.0247	2.0	Standard	No Exceedance
G275	UA	E005	Beryllium, total	mg/L	10/14/20 - 05/02/24	11	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G275	UA	E005	Boron, total	mg/L	10/14/20 - 05/02/24	11	0	CI around mean	1.51	2	Standard	No Exceedance
G275	UA	E005	Cadmium, total	mg/L	10/14/20 - 05/02/24	11	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G275	UA	E005	Chloride, total	mg/L	10/14/20 - 05/02/24	11	0	CI around mean	16.2	200	Standard	No Exceedance
G275	UA	E005	Chromium, total	mg/L	10/14/20 - 05/02/24	11	85	CI around median	0.004	0.1	Standard	No Exceedance
G275	UA	E005	Cobalt, total	mg/L	10/14/20 - 05/02/24	11	95	CI around median	0.001	0.006	Standard	No Exceedance
G275	UA	E005	Fluoride, total	mg/L	10/14/20 - 05/02/24	11	10	CI around mean	0.272	4.0	Standard	No Exceedance
G275	UA	E005	Lead, total	mg/L	10/14/20 - 05/02/24	11	58	CI around median	0.001	0.0120	Background	No Exceedance
G275	UA	E005	Lithium, total	mg/L	06/08/23 - 05/02/24	3	33	Most recent sample	0.0077	0.04	Standard	No Exceedance
G275	UA	E005	Mercury, total	mg/L	10/14/20 - 05/02/24	11	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G275	UA	E005	Molybdenum, total	mg/L	10/14/20 - 05/02/24	11	92	CI around median	0.001	0.1	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G275	UA	E005	pH (field)	SU	10/14/20 - 05/02/24	11	0	CI around mean	6.9/7.1	6.5/9.0	Standard/Standard	No Exceedance
G275	UA	E005	Radium 226 + Radium 228, total	pCi/L	06/08/23 - 05/02/24	3	0	Most recent sample	0.223	5	Standard	No Exceedance
G275	UA	E005	Selenium, total	mg/L	10/14/20 - 05/02/24	11	80	CI around median	0.001	0.05	Standard	No Exceedance
G275	UA	E005	Sulfate, total	mg/L	10/14/20 - 05/02/24	11	0	CB around linear reg	184	400	Standard	No Exceedance
G275	UA	E005	Thallium, total	mg/L	10/14/20 - 05/02/24	11	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G275	UA	E005	Total Dissolved Solids	mg/L	10/14/20 - 05/02/24	11	0	CI around mean	893	1,200	Standard	No Exceedance
G275D	DA	E005	Antimony, total	mg/L	03/30/21 - 05/02/24	10	90	CB around T-S line	0.00046	0.006	Standard	No Exceedance
G275D	DA	E005	Arsenic, total	mg/L	03/30/21 - 05/02/24	10	0	CB around linear reg	0.0141	0.010	Standard	Exceedance
G275D	DA	E005	Barium, total	mg/L	03/30/21 - 05/02/24	10	0	CI around mean	0.337	2.0	Standard	No Exceedance
G275D	DA	E005	Beryllium, total	mg/L	03/30/21 - 05/02/24	10	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G275D	DA	E005	Boron, total	mg/L	03/30/21 - 05/02/24	10	0	CB around T-S line	-1.72	2	Standard	No Exceedance
G275D	DA	E005	Cadmium, total	mg/L	03/30/21 - 05/02/24	10	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G275D	DA	E005	Chloride, total	mg/L	03/30/21 - 05/02/24	10	0	CI around mean	19.9	200	Standard	No Exceedance
G275D	DA	E005	Chromium, total	mg/L	03/30/21 - 05/02/24	10	80	CB around T-S line	-0.00373	0.1	Standard	No Exceedance
G275D	DA	E005	Cobalt, total	mg/L	03/30/21 - 05/02/24	10	60	CB around T-S line	-0.00365	0.006	Standard	No Exceedance
G275D	DA	E005	Fluoride, total	mg/L	03/30/21 - 05/02/24	10	0	CI around mean	0.402	4.0	Standard	No Exceedance
G275D	DA	E005	Lead, total	mg/L	03/30/21 - 05/02/24	10	90	CI around median	0.001	0.0120	Background	No Exceedance
G275D	DA	E005	Lithium, total	mg/L	03/30/21 - 05/02/24	10	70	CB around T-S line	-0.000983	0.04	Standard	No Exceedance
G275D	DA	E005	Mercury, total	mg/L	03/30/21 - 05/02/24	10	90	CI around median	0.0002	0.002	Standard	No Exceedance
G275D	DA	E005	Molybdenum, total	mg/L	03/30/21 - 05/02/24	10	10	CB around linear reg	-0.00914	0.1	Standard	No Exceedance
G275D	DA	E005	pH (field)	SU	03/30/21 - 05/02/24	10	0	CI around mean	7.0/7.3	6.5/9.0	Standard/Standard	No Exceedance
G275D	DA	E005	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 05/02/24	11	0	CI around mean	0.607	5	Standard	No Exceedance
G275D	DA	E005	Selenium, total	mg/L	03/30/21 - 05/02/24	10	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G275D	DA	E005	Sulfate, total	mg/L	03/30/21 - 05/02/24	10	0	CB around linear reg	50.6	400	Standard	No Exceedance
G275D	DA	E005	Thallium, total	mg/L	03/30/21 - 05/02/24	10	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G275D	DA	E005	Total Dissolved Solids	mg/L	03/30/21 - 05/02/24	10	0	CI around median	840	1,200	Standard	No Exceedance
G276	UA	E005	Antimony, total	mg/L	11/24/15 - 05/07/24	26	97	CB around T-S line	0.00243	0.006	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G276	UA	E005	Arsenic, total	mg/L	11/24/15 - 05/07/24	29	85	CI around median	0.001	0.010	Standard	No Exceedance
G276	UA	E005	Barium, total	mg/L	11/24/15 - 05/07/24	29	0	CB around T-S line	0.0325	2.0	Standard	No Exceedance
G276	UA	E005	Beryllium, total	mg/L	11/24/15 - 05/07/24	26	94	Most recent sample	0.001	0.004	Standard	No Exceedance
G276	UA	E005	Boron, total	mg/L	11/24/15 - 05/07/24	30	11	CI around geomean	0.0175	2	Standard	No Exceedance
G276	UA	E005	Cadmium, total	mg/L	11/24/15 - 05/07/24	26	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G276	UA	E005	Chloride, total	mg/L	11/24/15 - 05/07/24	30	0	CI around median	22	200	Standard	No Exceedance
G276	UA	E005	Chromium, total	mg/L	11/24/15 - 05/07/24	28	84	CI around median	0.004	0.1	Standard	No Exceedance
G276	UA	E005	Cobalt, total	mg/L	11/24/15 - 05/07/24	28	97	CB around T-S line	0.002	0.006	Standard	No Exceedance
G276	UA	E005	Fluoride, total	mg/L	11/24/15 - 05/07/24	30	5	CI around median	0.355	4.0	Standard	No Exceedance
G276	UA	E005	Lead, total	mg/L	11/24/15 - 05/07/24	29	79	CI around median	0.001	0.0120	Background	No Exceedance
G276	UA	E005	Lithium, total	mg/L	11/24/15 - 05/07/24	24	42	CI around median	0.012	0.04	Standard	No Exceedance
G276	UA	E005	Mercury, total	mg/L	11/24/15 - 05/07/24	26	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G276	UA	E005	Molybdenum, total	mg/L	11/24/15 - 05/07/24	29	80	CI around median	0.001	0.1	Standard	No Exceedance
G276	UA	E005	pH (field)	SU	11/24/15 - 05/07/24	31	0	CB around linear reg	6.7/7.0	6.5/9.0	Standard/Standard	No Exceedance
G276	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 05/07/24	24	0	CI around geomean	0.383	5	Standard	No Exceedance
G276	UA	E005	Selenium, total	mg/L	11/24/15 - 05/07/24	29	38	CB around linear reg	0.000718	0.05	Standard	No Exceedance
G276	UA	E005	Sulfate, total	mg/L	11/24/15 - 05/07/24	30	0	CB around T-S line	253	400	Standard	No Exceedance
G276	UA	E005	Thallium, total	mg/L	11/24/15 - 05/07/24	27	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G276	UA	E005	Total Dissolved Solids	mg/L	11/24/15 - 05/07/24	30	0	CB around T-S line	856	1,200	Standard	No Exceedance
G277	UA	E005	Antimony, total	mg/L	10/14/20 - 05/07/24	12	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G277	UA	E005	Arsenic, total	mg/L	10/14/20 - 05/07/24	12	60	CI around median	0.001	0.010	Standard	No Exceedance
G277	UA	E005	Barium, total	mg/L	10/14/20 - 05/07/24	12	0	CB around linear reg	0.0239	2.0	Standard	No Exceedance
G277	UA	E005	Beryllium, total	mg/L	10/14/20 - 05/07/24	12	90	Most recent sample	0.001	0.004	Standard	No Exceedance
G277	UA	E005	Boron, total	mg/L	10/14/20 - 05/07/24	12	13	CI around mean	0.06	2	Standard	No Exceedance
G277	UA	E005	Cadmium, total	mg/L	10/14/20 - 05/07/24	12	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G277	UA	E005	Chloride, total	mg/L	10/14/20 - 05/07/24	12	0	CI around mean	67.9	200	Standard	No Exceedance
G277	UA	E005	Chromium, total	mg/L	10/14/20 - 05/07/24	12	58	CI around median	0.0017	0.1	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G277	UA	E005	Cobalt, total	mg/L	10/14/20 - 05/07/24	12	79	CI around median	0.001	0.006	Standard	No Exceedance
G277	UA	E005	Fluoride, total	mg/L	10/14/20 - 05/07/24	12	10	CI around median	0.125	4.0	Standard	No Exceedance
G277	UA	E005	Lead, total	mg/L	10/14/20 - 05/07/24	12	57	CI around median	0.001	0.0120	Background	No Exceedance
G277	UA	E005	Lithium, total	mg/L	06/01/23 - 05/07/24	3	33	Most recent sample	0.01	0.04	Standard	No Exceedance
G277	UA	E005	Mercury, total	mg/L	10/14/20 - 05/07/24	12	95	Most recent sample	0.0002	0.002	Standard	No Exceedance
G277	UA	E005	Molybdenum, total	mg/L	10/14/20 - 05/07/24	12	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G277	UA	E005	pH (field)	SU	10/14/20 - 05/07/24	12	0	CI around mean	6.7/7.0	6.5/9.0	Standard/Standard	No Exceedance
G277	UA	E005	Radium 226 + Radium 228, total	pCi/L	06/01/23 - 05/07/24	3	0	Most recent sample	0.0358	5	Standard	No Exceedance
G277	UA	E005	Selenium, total	mg/L	10/14/20 - 05/07/24	12	58	CI around median	0.001	0.05	Standard	No Exceedance
G277	UA	E005	Sulfate, total	mg/L	10/14/20 - 05/07/24	12	0	CI around mean	307	400	Standard	No Exceedance
G277	UA	E005	Thallium, total	mg/L	10/14/20 - 05/07/24	12	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G277	UA	E005	Total Dissolved Solids	mg/L	10/14/20 - 05/07/24	12	0	CI around mean	975	1,200	Standard	No Exceedance
G279	UA	E005	Antimony, total	mg/L	11/24/15 - 05/03/24	26	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G279	UA	E005	Arsenic, total	mg/L	11/24/15 - 05/03/24	29	80	CI around median	0.001	0.010	Standard	No Exceedance
G279	UA	E005	Barium, total	mg/L	11/24/15 - 05/03/24	29	0	CB around T-S line	0.0313	2.0	Standard	No Exceedance
G279	UA	E005	Beryllium, total	mg/L	11/24/15 - 05/03/24	26	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G279	UA	E005	Boron, total	mg/L	11/24/15 - 05/03/24	30	20	CB around T-S line	0.234	2	Standard	No Exceedance
G279	UA	E005	Cadmium, total	mg/L	11/24/15 - 05/03/24	26	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G279	UA	E005	Chloride, total	mg/L	11/24/15 - 05/03/24	30	0	CB around linear reg	193	200	Standard	No Exceedance
G279	UA	E005	Chromium, total	mg/L	11/24/15 - 05/03/24	28	90	CB around T-S line	0.004	0.1	Standard	No Exceedance
G279	UA	E005	Cobalt, total	mg/L	11/24/15 - 05/03/24	28	88	CB around T-S line	0.002	0.006	Standard	No Exceedance
G279	UA	E005	Fluoride, total	mg/L	11/24/15 - 05/03/24	30	7	CI around mean	0.344	4.0	Standard	No Exceedance
G279	UA	E005	Lead, total	mg/L	11/24/15 - 05/03/24	29	84	CI around median	0.001	0.0120	Background	No Exceedance
G279	UA	E005	Lithium, total	mg/L	11/24/15 - 05/03/24	29	69	CB around T-S line	0.012	0.04	Standard	No Exceedance
G279	UA	E005	Mercury, total	mg/L	11/24/15 - 05/03/24	26	97	Most recent sample	0.0002	0.002	Standard	No Exceedance
G279	UA	E005	Molybdenum, total	mg/L	11/24/15 - 05/03/24	29	84	CI around median	0.001	0.1	Standard	No Exceedance
G279	UA	E005	pH (field)	SU	11/24/15 - 05/03/24	30	0	CB around linear reg	6.5/6.8	6.5/9.0	Standard/Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G279	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 05/03/24	29	0	CI around mean	0.633	5	Standard	No Exceedance
G279	UA	E005	Selenium, total	mg/L	11/24/15 - 05/03/24	29	22	CB around linear reg	-0.00394	0.05	Standard	No Exceedance
G279	UA	E005	Sulfate, total	mg/L	11/24/15 - 05/03/24	30	0	CI around geomean	414	400	Standard	Exceedance
G279	UA	E005	Thallium, total	mg/L	11/24/15 - 05/03/24	27	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G279	UA	E005	Total Dissolved Solids	mg/L	11/24/15 - 05/03/24	30	0	CB around linear reg	2,440	1,200	Standard	Exceedance
G283	LCU	E005	Antimony, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G283	LCU	E005	Arsenic, total	mg/L	03/31/21 - 05/06/24	13	62	CI around median	0.001	0.010	Standard	No Exceedance
G283	LCU	E005	Barium, total	mg/L	03/31/21 - 05/06/24	13	0	CI around mean	0.16	2.0	Standard	No Exceedance
G283	LCU	E005	Beryllium, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G283	LCU	E005	Boron, total	mg/L	03/31/21 - 05/06/24	13	0	CI around mean	0.0384	2	Standard	No Exceedance
G283	LCU	E005	Cadmium, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G283	LCU	E005	Chloride, total	mg/L	03/31/21 - 05/06/24	13	0	CI around mean	37.9	200	Standard	No Exceedance
G283	LCU	E005	Chromium, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G283	LCU	E005	Cobalt, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G283	LCU	E005	Fluoride, total	mg/L	03/31/21 - 05/06/24	13	15	CI around mean	0.308	4.0	Standard	No Exceedance
G283	LCU	E005	Lead, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.001	0.0120	Background	No Exceedance
G283	LCU	E005	Lithium, total	mg/L	03/31/21 - 05/06/24	13	69	CB around T-S line	0.00755	0.04	Standard	No Exceedance
G283	LCU	E005	Mercury, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G283	LCU	E005	Molybdenum, total	mg/L	03/31/21 - 05/06/24	13	0	CI around geomean	0.00161	0.1	Standard	No Exceedance
G283	LCU	E005	pH (field)	SU	03/31/21 - 05/06/24	13	0	CI around mean	7.0/7.1	6.5/9.0	Standard/Standard	No Exceedance
G283	LCU	E005	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 05/06/24	13	0	CI around geomean	0.595	5	Standard	No Exceedance
G283	LCU	E005	Selenium, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G283	LCU	E005	Sulfate, total	mg/L	03/31/21 - 05/06/24	13	0	CI around mean	240	400	Standard	No Exceedance
G283	LCU	E005	Thallium, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G283	LCU	E005	Total Dissolved Solids	mg/L	03/31/21 - 05/06/24	13	0	CI around mean	792	1,200	Standard	No Exceedance
G284	UA	E005	Antimony, total	mg/L	03/30/21 - 05/06/24	12	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G284	UA	E005	Arsenic, total	mg/L	03/30/21 - 05/06/24	12	92	Most recent sample	0.001	0.010	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G284	UA	E005	Barium, total	mg/L	03/30/21 - 05/06/24	12	0	CI around median	0.0622	2.0	Standard	No Exceedance
G284	UA	E005	Beryllium, total	mg/L	03/30/21 - 05/06/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G284	UA	E005	Boron, total	mg/L	03/30/21 - 05/06/24	12	0	CI around mean	0.0369	2	Standard	No Exceedance
G284	UA	E005	Cadmium, total	mg/L	03/30/21 - 05/06/24	12	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G284	UA	E005	Chloride, total	mg/L	03/30/21 - 05/06/24	12	0	CI around mean	33.8	200	Standard	No Exceedance
G284	UA	E005	Chromium, total	mg/L	03/30/21 - 05/06/24	12	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G284	UA	E005	Cobalt, total	mg/L	03/30/21 - 05/06/24	12	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G284	UA	E005	Fluoride, total	mg/L	03/30/21 - 05/06/24	12	0	CI around mean	0.483	4.0	Standard	No Exceedance
G284	UA	E005	Lead, total	mg/L	03/30/21 - 05/06/24	12	100	All ND - Last	0.001	0.0120	Background	No Exceedance
G284	UA	E005	Lithium, total	mg/L	03/30/21 - 05/06/24	12	75	CB around T-S line	0.00906	0.04	Standard	No Exceedance
G284	UA	E005	Mercury, total	mg/L	03/30/21 - 05/06/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G284	UA	E005	Molybdenum, total	mg/L	03/30/21 - 05/06/24	12	33	CI around median	0.001	0.1	Standard	No Exceedance
G284	UA	E005	pH (field)	SU	03/30/21 - 05/06/24	12	0	CI around mean	7.1/7.3	6.5/9.0	Standard/Standard	No Exceedance
G284	UA	E005	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 05/06/24	12	0	CI around mean	0.16	5	Standard	No Exceedance
G284	UA	E005	Selenium, total	mg/L	03/30/21 - 05/06/24	12	83	CI around median	0.001	0.05	Standard	No Exceedance
G284	UA	E005	Sulfate, total	mg/L	03/30/21 - 05/06/24	12	0	CI around median	63	400	Standard	No Exceedance
G284	UA	E005	Thallium, total	mg/L	03/30/21 - 05/06/24	12	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G284	UA	E005	Total Dissolved Solids	mg/L	03/30/21 - 05/06/24	12	0	CI around mean	449	1,200	Standard	No Exceedance
G285	LCU	E005	Antimony, total	mg/L	03/30/21 - 05/06/24	13	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G285	LCU	E005	Arsenic, total	mg/L	03/30/21 - 05/06/24	13	69	CI around median	0.001	0.010	Standard	No Exceedance
G285	LCU	E005	Barium, total	mg/L	03/30/21 - 05/06/24	13	0	CB around linear reg	0.0207	2.0	Standard	No Exceedance
G285	LCU	E005	Beryllium, total	mg/L	03/30/21 - 05/06/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G285	LCU	E005	Boron, total	mg/L	03/30/21 - 05/06/24	13	0	CI around mean	0.108	2	Standard	No Exceedance
G285	LCU	E005	Cadmium, total	mg/L	03/30/21 - 05/06/24	13	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G285	LCU	E005	Chloride, total	mg/L	03/30/21 - 05/06/24	13	0	CB around linear reg	4.51	200	Standard	No Exceedance
G285	LCU	E005	Chromium, total	mg/L	03/30/21 - 05/06/24	13	92	CB around T-S line	0.00107	0.1	Standard	No Exceedance
G285	LCU	E005	Cobalt, total	mg/L	03/30/21 - 05/06/24	13	23	CI around mean	0.00177	0.006	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G285	LCU	E005	Fluoride, total	mg/L	03/30/21 - 05/06/24	13	23	CI around mean	0.284	4.0	Standard	No Exceedance
G285	LCU	E005	Lead, total	mg/L	03/30/21 - 05/06/24	13	100	All ND - Last	0.001	0.0120	Background	No Exceedance
G285	LCU	E005	Lithium, total	mg/L	03/30/21 - 05/06/24	13	69	CB around T-S line	0.0025	0.04	Standard	No Exceedance
G285	LCU	E005	Mercury, total	mg/L	03/30/21 - 05/06/24	13	92	CI around median	0.0002	0.002	Standard	No Exceedance
G285	LCU	E005	Molybdenum, total	mg/L	03/30/21 - 05/06/24	13	0	CB around linear reg	0.000711	0.1	Standard	No Exceedance
G285	LCU	E005	pH (field)	SU	03/30/21 - 05/06/24	13	0	CI around median	6.7/6.9	6.5/9.0	Standard/Standard	No Exceedance
G285	LCU	E005	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 05/06/24	13	0	CI around geomean	1.23	5	Standard	No Exceedance
G285	LCU	E005	Selenium, total	mg/L	03/30/21 - 05/06/24	13	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G285	LCU	E005	Sulfate, total	mg/L	03/30/21 - 05/06/24	13	0	CB around linear reg	604	400	Standard	Exceedance
G285	LCU	E005	Thallium, total	mg/L	03/30/21 - 05/06/24	13	92	CB around T-S line	0.001	0.002	Standard	No Exceedance
G285	LCU	E005	Total Dissolved Solids	mg/L	03/30/21 - 05/06/24	13	0	CI around mean	1,450	1,200	Standard	Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF RECYCLE 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

LCU = Lower Confining Unit

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 RECYCLE POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G271	UA	E006	Antimony, total	mg/L	11/23/15 - 07/31/24	27	92	CB around T-S line	0.00243	0.006	Standard	No Exceedance
G271	UA	E006	Arsenic, total	mg/L	11/23/15 - 07/31/24	29	78	CI around median	0.001	0.010	Standard	No Exceedance
G271	UA	E006	Barium, total	mg/L	11/23/15 - 07/31/24	30	0	CB around T-S line	0.0158	2.0	Standard	No Exceedance
G271	UA	E006	Beryllium, total	mg/L	11/23/15 - 07/31/24	27	97	CI around median	0.001	0.004	Standard	No Exceedance
G271	UA	E006	Boron, total	mg/L	11/23/15 - 07/31/24	31	0	CI around geomean	0.675	2	Standard	No Exceedance
G271	UA	E006	Cadmium, total	mg/L	11/23/15 - 07/31/24	27	98	CI around median	0.001	0.005	Standard	No Exceedance
G271	UA	E006	Chloride, total	mg/L	11/23/15 - 07/31/24	31	0	CB around linear reg	47.3	200	Standard	No Exceedance
G271	UA	E006	Chromium, total	mg/L	11/23/15 - 07/31/24	29	78	CI around median	0.004	0.1	Standard	No Exceedance
G271	UA	E006	Cobalt, total	mg/L	11/23/15 - 07/31/24	29	88	CB around T-S line	0.00174	0.006	Standard	No Exceedance
G271	UA	E006	Fluoride, total	mg/L	11/23/15 - 07/31/24	31	7	CI around mean	0.341	4.0	Standard	No Exceedance
G271	UA	E006	Lead, total	mg/L	11/23/15 - 07/31/24	30	62	CI around median	0.001	0.0120	Background	No Exceedance
G271	UA	E006	Lithium, total	mg/L	11/23/15 - 07/31/24	25	88	CI around median	0.01	0.04	Standard	No Exceedance
G271	UA	E006	Mercury, total	mg/L	11/23/15 - 07/31/24	27	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G271	UA	E006	Molybdenum, total	mg/L	11/23/15 - 07/31/24	30	72	CI around median	0.001	0.1	Standard	No Exceedance
G271	UA	E006	pH (field)	SU	11/23/15 - 07/31/24	33	0	CI around mean	7.1/7.3	6.5/9.0	Standard/Standard	No Exceedance
G271	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/23/15 - 07/31/24	25	0	CI around geomean	0.379	5	Standard	No Exceedance
G271	UA	E006	Selenium, total	mg/L	11/23/15 - 07/31/24	29	7	CI around mean	0.0015	0.05	Standard	No Exceedance
G271	UA	E006	Sulfate, total	mg/L	11/23/15 - 07/31/24	31	0	CB around T-S line	173	400	Standard	No Exceedance
G271	UA	E006	Thallium, total	mg/L	11/23/15 - 07/31/24	28	98	CB around T-S line	0.001	0.002	Standard	No Exceedance
G271	UA	E006	Total Dissolved Solids	mg/L	11/23/15 - 07/31/24	31	0	CB around linear reg	616	1,200	Standard	No Exceedance
G273	UA	E006	Antimony, total	mg/L	11/24/15 - 07/31/24	27	95	CB around T-S line	0.00235	0.006	Standard	No Exceedance
G273	UA	E006	Arsenic, total	mg/L	11/24/15 - 07/31/24	30	86	CI around median	0.001	0.010	Standard	No Exceedance
G273	UA	E006	Barium, total	mg/L	11/24/15 - 07/31/24	30	0	CI around median	0.029	2.0	Standard	No Exceedance
G273	UA	E006	Beryllium, total	mg/L	11/24/15 - 07/31/24	27	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G273	UA	E006	Boron, total	mg/L	11/24/15 - 07/31/24	31	5	CB around T-S line	-0.0697	2	Standard	No Exceedance
G273	UA	E006	Cadmium, total	mg/L	11/24/15 - 07/31/24	27	98	CI around median	0.001	0.005	Standard	No Exceedance
G273	UA	E006	Chloride, total	mg/L	11/24/15 - 07/31/24	31	0	CB around T-S line	70.5	200	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G273	UA	E006	Chromium, total	mg/L	11/24/15 - 07/31/24	29	95	CB around T-S line	0.00393	0.1	Standard	No Exceedance
G273	UA	E006	Cobalt, total	mg/L	11/24/15 - 07/31/24	29	98	CB around T-S line	0.00176	0.006	Standard	No Exceedance
G273	UA	E006	Fluoride, total	mg/L	11/24/15 - 07/31/24	31	19	CI around mean	0.303	4.0	Standard	No Exceedance
G273	UA	E006	Lead, total	mg/L	11/24/15 - 07/31/24	30	89	CI around median	0.001	0.0120	Background	No Exceedance
G273	UA	E006	Lithium, total	mg/L	11/24/15 - 07/31/24	25	72	CI around median	0.01	0.04	Standard	No Exceedance
G273	UA	E006	Mercury, total	mg/L	11/24/15 - 07/31/24	27	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G273	UA	E006	Molybdenum, total	mg/L	11/24/15 - 07/31/24	30	91	CB around T-S line	0.001	0.1	Standard	No Exceedance
G273	UA	E006	pH (field)	SU	11/24/15 - 07/31/24	33	0	CI around mean	7.0/7.1	6.5/9.0	Standard/Standard	No Exceedance
G273	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 07/31/24	25	0	CI around mean	0.344	5	Standard	No Exceedance
G273	UA	E006	Selenium, total	mg/L	11/24/15 - 07/31/24	30	95	CI around median	0.001	0.05	Standard	No Exceedance
G273	UA	E006	Sulfate, total	mg/L	11/24/15 - 07/31/24	31	0	CI around median	410	400	Standard	Exceedance
G273	UA	E006	Thallium, total	mg/L	11/24/15 - 07/31/24	28	95	CB around T-S line	0.001	0.002	Standard	No Exceedance
G273	UA	E006	Total Dissolved Solids	mg/L	11/24/15 - 07/31/24	31	0	CB around linear reg	1,040	1,200	Standard	No Exceedance
G275	UA	E006	Antimony, total	mg/L	10/14/20 - 08/01/24	12	95	CB around T-S line	0.00123	0.006	Standard	No Exceedance
G275	UA	E006	Arsenic, total	mg/L	10/14/20 - 08/01/24	12	56	CI around median	0.001	0.010	Standard	No Exceedance
G275	UA	E006	Barium, total	mg/L	10/14/20 - 08/01/24	12	0	CI around geomean	0.0254	2.0	Standard	No Exceedance
G275	UA	E006	Beryllium, total	mg/L	10/14/20 - 08/01/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G275	UA	E006	Boron, total	mg/L	10/14/20 - 08/01/24	12	0	CI around mean	1.62	2	Standard	No Exceedance
G275	UA	E006	Cadmium, total	mg/L	10/14/20 - 08/01/24	12	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G275	UA	E006	Chloride, total	mg/L	10/14/20 - 08/01/24	12	0	CI around mean	16.1	200	Standard	No Exceedance
G275	UA	E006	Chromium, total	mg/L	10/14/20 - 08/01/24	12	86	CI around median	0.0021	0.1	Standard	No Exceedance
G275	UA	E006	Cobalt, total	mg/L	10/14/20 - 08/01/24	12	95	CB around T-S line	0.000858	0.006	Standard	No Exceedance
G275	UA	E006	Fluoride, total	mg/L	10/14/20 - 08/01/24	12	14	CI around mean	0.268	4.0	Standard	No Exceedance
G275	UA	E006	Lead, total	mg/L	10/14/20 - 08/01/24	12	59	CI around median	0.001	0.0120	Background	No Exceedance
G275	UA	E006	Lithium, total	mg/L	06/08/23 - 08/01/24	4	25	CI around mean	0.00698	0.04	Standard	No Exceedance
G275	UA	E006	Mercury, total	mg/L	10/14/20 - 08/01/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G275	UA	E006	Molybdenum, total	mg/L	10/14/20 - 08/01/24	12	92	CB around T-S line	0.001	0.1	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G275	UA	E006	pH (field)	SU	10/14/20 - 08/01/24	12	0	CI around mean	6.9/7.1	6.5/9.0	Standard/Standard	No Exceedance
G275	UA	E006	Radium 226 + Radium 228, total	pCi/L	06/08/23 - 08/01/24	4	0	CI around mean	-0.343	5	Standard	No Exceedance
G275	UA	E006	Selenium, total	mg/L	10/14/20 - 08/01/24	12	81	CI around median	0.001	0.05	Standard	No Exceedance
G275	UA	E006	Sulfate, total	mg/L	10/14/20 - 08/01/24	12	0	CB around linear reg	200	400	Standard	No Exceedance
G275	UA	E006	Thallium, total	mg/L	10/14/20 - 08/01/24	12	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G275	UA	E006	Total Dissolved Solids	mg/L	10/14/20 - 08/01/24	12	0	CI around mean	902	1,200	Standard	No Exceedance
G275D	DA	E006	Antimony, total	mg/L	03/30/21 - 08/01/24	11	91	CB around T-S line	0.000259	0.006	Standard	No Exceedance
G275D	DA	E006	Arsenic, total	mg/L	03/30/21 - 08/01/24	11	0	CB around linear reg	0.0156	0.010	Standard	Exceedance
G275D	DA	E006	Barium, total	mg/L	03/30/21 - 08/01/24	11	0	CI around mean	0.348	2.0	Standard	No Exceedance
G275D	DA	E006	Beryllium, total	mg/L	03/30/21 - 08/01/24	11	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G275D	DA	E006	Boron, total	mg/L	03/30/21 - 08/01/24	11	0	CB around T-S line	-1.59	2	Standard	No Exceedance
G275D	DA	E006	Cadmium, total	mg/L	03/30/21 - 08/01/24	11	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G275D	DA	E006	Chloride, total	mg/L	03/30/21 - 08/01/24	11	0	CI around mean	19.9	200	Standard	No Exceedance
G275D	DA	E006	Chromium, total	mg/L	03/30/21 - 08/01/24	11	82	CB around T-S line	-0.00318	0.1	Standard	No Exceedance
G275D	DA	E006	Cobalt, total	mg/L	03/30/21 - 08/01/24	11	64	CB around T-S line	-0.00177	0.006	Standard	No Exceedance
G275D	DA	E006	Fluoride, total	mg/L	03/30/21 - 08/01/24	11	9	CI around mean	0.368	4.0	Standard	No Exceedance
G275D	DA	E006	Lead, total	mg/L	03/30/21 - 08/01/24	11	91	CI around median	0.001	0.0120	Background	No Exceedance
G275D	DA	E006	Lithium, total	mg/L	03/30/21 - 08/01/24	11	64	CB around T-S line	-0.00236	0.04	Standard	No Exceedance
G275D	DA	E006	Mercury, total	mg/L	03/30/21 - 08/01/24	11	91	CI around median	0.0002	0.002	Standard	No Exceedance
G275D	DA	E006	Molybdenum, total	mg/L	03/30/21 - 08/01/24	11	18	CB around linear reg	-0.00934	0.1	Standard	No Exceedance
G275D	DA	E006	pH (field)	SU	03/30/21 - 08/01/24	11	0	CI around mean	7.0/7.3	6.5/9.0	Standard/Standard	No Exceedance
G275D	DA	E006	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/01/24	12	0	CI around mean	0.657	5	Standard	No Exceedance
G275D	DA	E006	Selenium, total	mg/L	03/30/21 - 08/01/24	11	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G275D	DA	E006	Sulfate, total	mg/L	03/30/21 - 08/01/24	11	0	CI around mean	128	400	Standard	No Exceedance
G275D	DA	E006	Thallium, total	mg/L	03/30/21 - 08/01/24	11	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G275D	DA	E006	Total Dissolved Solids	mg/L	03/30/21 - 08/01/24	11	0	CI around median	840	1,200	Standard	No Exceedance
G276	UA	E006	Antimony, total	mg/L	11/24/15 - 07/31/24	27	95	CB around T-S line	0.00229	0.006	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G276	UA	E006	Arsenic, total	mg/L	11/24/15 - 07/31/24	30	85	CI around median	0.001	0.010	Standard	No Exceedance
G276	UA	E006	Barium, total	mg/L	11/24/15 - 07/31/24	30	0	CB around T-S line	0.0317	2.0	Standard	No Exceedance
G276	UA	E006	Beryllium, total	mg/L	11/24/15 - 07/31/24	27	95	Most recent sample	0.001	0.004	Standard	No Exceedance
G276	UA	E006	Boron, total	mg/L	11/24/15 - 07/31/24	31	11	CI around geomean	0.0177	2	Standard	No Exceedance
G276	UA	E006	Cadmium, total	mg/L	11/24/15 - 07/31/24	27	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G276	UA	E006	Chloride, total	mg/L	11/24/15 - 07/31/24	31	0	CI around median	23	200	Standard	No Exceedance
G276	UA	E006	Chromium, total	mg/L	11/24/15 - 07/31/24	29	82	CI around median	0.004	0.1	Standard	No Exceedance
G276	UA	E006	Cobalt, total	mg/L	11/24/15 - 07/31/24	29	97	CB around T-S line	0.00178	0.006	Standard	No Exceedance
G276	UA	E006	Fluoride, total	mg/L	11/24/15 - 07/31/24	31	7	CI around median	0.355	4.0	Standard	No Exceedance
G276	UA	E006	Lead, total	mg/L	11/24/15 - 07/31/24	30	79	CI around median	0.001	0.0120	Background	No Exceedance
G276	UA	E006	Lithium, total	mg/L	11/24/15 - 07/31/24	25	40	CI around median	0.0115	0.04	Standard	No Exceedance
G276	UA	E006	Mercury, total	mg/L	11/24/15 - 07/31/24	27	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G276	UA	E006	Molybdenum, total	mg/L	11/24/15 - 07/31/24	30	77	CI around median	0.001	0.1	Standard	No Exceedance
G276	UA	E006	pH (field)	SU	11/24/15 - 07/31/24	32	0	CB around linear reg	6.7/7.0	6.5/9.0	Standard/Standard	No Exceedance
G276	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 07/31/24	25	0	CI around geomean	0.392	5	Standard	No Exceedance
G276	UA	E006	Selenium, total	mg/L	11/24/15 - 07/31/24	30	40	CB around linear reg	0.000703	0.05	Standard	No Exceedance
G276	UA	E006	Sulfate, total	mg/L	11/24/15 - 07/31/24	31	0	CB around T-S line	253	400	Standard	No Exceedance
G276	UA	E006	Thallium, total	mg/L	11/24/15 - 07/31/24	28	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G276	UA	E006	Total Dissolved Solids	mg/L	11/24/15 - 07/31/24	31	0	CB around T-S line	849	1,200	Standard	No Exceedance
G277	UA	E006	Antimony, total	mg/L	10/14/20 - 07/30/24	13	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G277	UA	E006	Arsenic, total	mg/L	10/14/20 - 07/30/24	13	58	CI around median	0.001	0.010	Standard	No Exceedance
G277	UA	E006	Barium, total	mg/L	10/14/20 - 07/30/24	13	0	CB around linear reg	0.0222	2.0	Standard	No Exceedance
G277	UA	E006	Beryllium, total	mg/L	10/14/20 - 07/30/24	13	90	Most recent sample	0.001	0.004	Standard	No Exceedance
G277	UA	E006	Boron, total	mg/L	10/14/20 - 07/30/24	13	13	CB around linear reg	0.0998	2	Standard	No Exceedance
G277	UA	E006	Cadmium, total	mg/L	10/14/20 - 07/30/24	13	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G277	UA	E006	Chloride, total	mg/L	10/14/20 - 07/30/24	13	0	CB around linear reg	103	200	Standard	No Exceedance
G277	UA	E006	Chromium, total	mg/L	10/14/20 - 07/30/24	13	55	CI around median	0.004	0.1	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G277	UA	E006	Cobalt, total	mg/L	10/14/20 - 07/30/24	13	80	CB around T-S line	0.000867	0.006	Standard	No Exceedance
G277	UA	E006	Fluoride, total	mg/L	10/14/20 - 07/30/24	13	15	CI around median	0.25	4.0	Standard	No Exceedance
G277	UA	E006	Lead, total	mg/L	10/14/20 - 07/30/24	13	55	CI around median	0.001	0.0120	Background	No Exceedance
G277	UA	E006	Lithium, total	mg/L	06/01/23 - 07/30/24	4	25	CI around mean	0.00635	0.04	Standard	No Exceedance
G277	UA	E006	Mercury, total	mg/L	10/14/20 - 07/30/24	13	95	Most recent sample	0.0002	0.002	Standard	No Exceedance
G277	UA	E006	Molybdenum, total	mg/L	10/14/20 - 07/30/24	13	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G277	UA	E006	pH (field)	SU	10/14/20 - 07/30/24	13	0	CI around mean	6.7/7.0	6.5/9.0	Standard/Standard	No Exceedance
G277	UA	E006	Radium 226 + Radium 228, total	pCi/L	06/01/23 - 07/30/24	4	0	CI around mean	-0.601	5	Standard	No Exceedance
G277	UA	E006	Selenium, total	mg/L	10/14/20 - 07/30/24	13	60	CI around median	0.001	0.05	Standard	No Exceedance
G277	UA	E006	Sulfate, total	mg/L	10/14/20 - 07/30/24	13	0	CB around linear reg	482	400	Standard	Exceedance
G277	UA	E006	Thallium, total	mg/L	10/14/20 - 07/30/24	13	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G277	UA	E006	Total Dissolved Solids	mg/L	10/14/20 - 07/30/24	13	0	CB around linear reg	1,300	1,200	Standard	Exceedance
G279	UA	E006	Antimony, total	mg/L	11/24/15 - 07/30/24	27	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G279	UA	E006	Arsenic, total	mg/L	11/24/15 - 07/30/24	30	80	CI around median	0.001	0.010	Standard	No Exceedance
G279	UA	E006	Barium, total	mg/L	11/24/15 - 07/30/24	30	0	CB around T-S line	0.0285	2.0	Standard	No Exceedance
G279	UA	E006	Beryllium, total	mg/L	11/24/15 - 07/30/24	27	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G279	UA	E006	Boron, total	mg/L	11/24/15 - 07/30/24	31	19	CB around linear reg	1.59	2	Standard	No Exceedance
G279	UA	E006	Cadmium, total	mg/L	11/24/15 - 07/30/24	27	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G279	UA	E006	Chloride, total	mg/L	11/24/15 - 07/30/24	31	0	CB around linear reg	230	200	Standard	Exceedance
G279	UA	E006	Chromium, total	mg/L	11/24/15 - 07/30/24	29	90	CB around T-S line	0.00318	0.1	Standard	No Exceedance
G279	UA	E006	Cobalt, total	mg/L	11/24/15 - 07/30/24	29	88	CB around T-S line	0.00182	0.006	Standard	No Exceedance
G279	UA	E006	Fluoride, total	mg/L	11/24/15 - 07/30/24	31	9	CI around mean	0.34	4.0	Standard	No Exceedance
G279	UA	E006	Lead, total	mg/L	11/24/15 - 07/30/24	30	84	CI around median	0.001	0.0120	Background	No Exceedance
G279	UA	E006	Lithium, total	mg/L	11/24/15 - 07/30/24	30	67	CB around T-S line	0.012	0.04	Standard	No Exceedance
G279	UA	E006	Mercury, total	mg/L	11/24/15 - 07/30/24	27	97	Most recent sample	0.0002	0.002	Standard	No Exceedance
G279	UA	E006	Molybdenum, total	mg/L	11/24/15 - 07/30/24	30	84	CI around median	0.001	0.1	Standard	No Exceedance
G279	UA	E006	pH (field)	SU	11/24/15 - 07/30/24	31	0	CB around linear reg	6.5/6.8	6.5/9.0	Standard/Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G279	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 07/30/24	30	0	CI around mean	0.612	5	Standard	No Exceedance
G279	UA	E006	Selenium, total	mg/L	11/24/15 - 07/30/24	30	21	CB around linear reg	-0.00387	0.05	Standard	No Exceedance
G279	UA	E006	Sulfate, total	mg/L	11/24/15 - 07/30/24	31	0	CB around linear reg	1,190	400	Standard	Exceedance
G279	UA	E006	Thallium, total	mg/L	11/24/15 - 07/30/24	28	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G279	UA	E006	Total Dissolved Solids	mg/L	11/24/15 - 07/30/24	31	0	CB around linear reg	2,600	1,200	Standard	Exceedance
G283	LCU	E006	Antimony, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G283	LCU	E006	Arsenic, total	mg/L	03/31/21 - 08/07/24	14	64	CI around median	0.001	0.010	Standard	No Exceedance
G283	LCU	E006	Barium, total	mg/L	03/31/21 - 08/07/24	14	0	CI around mean	0.16	2.0	Standard	No Exceedance
G283	LCU	E006	Beryllium, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G283	LCU	E006	Boron, total	mg/L	03/31/21 - 08/07/24	14	0	CI around mean	0.0396	2	Standard	No Exceedance
G283	LCU	E006	Cadmium, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G283	LCU	E006	Chloride, total	mg/L	03/31/21 - 08/07/24	14	0	CI around mean	38.1	200	Standard	No Exceedance
G283	LCU	E006	Chromium, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G283	LCU	E006	Cobalt, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G283	LCU	E006	Fluoride, total	mg/L	03/31/21 - 08/07/24	14	21	CI around mean	0.311	4.0	Standard	No Exceedance
G283	LCU	E006	Lead, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.001	0.0120	Background	No Exceedance
G283	LCU	E006	Lithium, total	mg/L	03/31/21 - 08/07/24	14	64	CB around T-S line	0.00696	0.04	Standard	No Exceedance
G283	LCU	E006	Mercury, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G283	LCU	E006	Molybdenum, total	mg/L	03/31/21 - 08/07/24	14	0	CI around geomean	0.00161	0.1	Standard	No Exceedance
G283	LCU	E006	pH (field)	SU	03/31/21 - 08/07/24	14	0	CI around mean	7.0/7.1	6.5/9.0	Standard/Standard	No Exceedance
G283	LCU	E006	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 08/07/24	14	0	CI around geomean	0.634	5	Standard	No Exceedance
G283	LCU	E006	Selenium, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G283	LCU	E006	Sulfate, total	mg/L	03/31/21 - 08/07/24	14	0	CI around mean	241	400	Standard	No Exceedance
G283	LCU	E006	Thallium, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G283	LCU	E006	Total Dissolved Solids	mg/L	03/31/21 - 08/07/24	14	0	CI around mean	798	1,200	Standard	No Exceedance
G284	UA	E006	Antimony, total	mg/L	03/30/21 - 08/07/24	13	92	CB around T-S line	0.000397	0.006	Standard	No Exceedance
G284	UA	E006	Arsenic, total	mg/L	03/30/21 - 08/07/24	13	92	Most recent sample	0.001	0.010	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G284	UA	E006	Barium, total	mg/L	03/30/21 - 08/07/24	13	0	CI around median	0.063	2.0	Standard	No Exceedance
G284	UA	E006	Beryllium, total	mg/L	03/30/21 - 08/07/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G284	UA	E006	Boron, total	mg/L	03/30/21 - 08/07/24	13	0	CI around mean	0.038	2	Standard	No Exceedance
G284	UA	E006	Cadmium, total	mg/L	03/30/21 - 08/07/24	13	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G284	UA	E006	Chloride, total	mg/L	03/30/21 - 08/07/24	13	0	CI around mean	31.8	200	Standard	No Exceedance
G284	UA	E006	Chromium, total	mg/L	03/30/21 - 08/07/24	13	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G284	UA	E006	Cobalt, total	mg/L	03/30/21 - 08/07/24	13	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G284	UA	E006	Fluoride, total	mg/L	03/30/21 - 08/07/24	13	8	CI around mean	0.441	4.0	Standard	No Exceedance
G284	UA	E006	Lead, total	mg/L	03/30/21 - 08/07/24	13	100	All ND - Last	0.001	0.0120	Background	No Exceedance
G284	UA	E006	Lithium, total	mg/L	03/30/21 - 08/07/24	13	69	CB around T-S line	0.00836	0.04	Standard	No Exceedance
G284	UA	E006	Mercury, total	mg/L	03/30/21 - 08/07/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G284	UA	E006	Molybdenum, total	mg/L	03/30/21 - 08/07/24	13	31	CI around median	0.001	0.1	Standard	No Exceedance
G284	UA	E006	pH (field)	SU	03/30/21 - 08/07/24	13	0	CI around mean	7.1/7.2	6.5/9.0	Standard/Standard	No Exceedance
G284	UA	E006	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/07/24	13	0	CI around mean	0.205	5	Standard	No Exceedance
G284	UA	E006	Selenium, total	mg/L	03/30/21 - 08/07/24	13	77	CI around median	0.001	0.05	Standard	No Exceedance
G284	UA	E006	Sulfate, total	mg/L	03/30/21 - 08/07/24	13	0	CI around median	65	400	Standard	No Exceedance
G284	UA	E006	Thallium, total	mg/L	03/30/21 - 08/07/24	13	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G284	UA	E006	Total Dissolved Solids	mg/L	03/30/21 - 08/07/24	13	0	CI around mean	451	1,200	Standard	No Exceedance
G285	LCU	E006	Antimony, total	mg/L	03/30/21 - 08/07/24	14	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G285	LCU	E006	Arsenic, total	mg/L	03/30/21 - 08/07/24	14	64	CI around median	0.001	0.010	Standard	No Exceedance
G285	LCU	E006	Barium, total	mg/L	03/30/21 - 08/07/24	14	0	CB around linear reg	0.0201	2.0	Standard	No Exceedance
G285	LCU	E006	Beryllium, total	mg/L	03/30/21 - 08/07/24	14	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G285	LCU	E006	Boron, total	mg/L	03/30/21 - 08/07/24	14	0	CI around mean	0.108	2	Standard	No Exceedance
G285	LCU	E006	Cadmium, total	mg/L	03/30/21 - 08/07/24	14	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G285	LCU	E006	Chloride, total	mg/L	03/30/21 - 08/07/24	14	0	CB around linear reg	4.97	200	Standard	No Exceedance
G285	LCU	E006	Chromium, total	mg/L	03/30/21 - 08/07/24	14	86	CB around T-S line	0.000778	0.1	Standard	No Exceedance
G285	LCU	E006	Cobalt, total	mg/L	03/30/21 - 08/07/24	14	21	CI around mean	0.00175	0.006	Standard	No Exceedance

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G285	LCU	E006	Fluoride, total	mg/L	03/30/21 - 08/07/24	14	29	CB around linear reg	0.321	4.0	Standard	No Exceedance
G285	LCU	E006	Lead, total	mg/L	03/30/21 - 08/07/24	14	100	All ND - Last	0.001	0.0120	Background	No Exceedance
G285	LCU	E006	Lithium, total	mg/L	03/30/21 - 08/07/24	14	64	CB around T-S line	0.00135	0.04	Standard	No Exceedance
G285	LCU	E006	Mercury, total	mg/L	03/30/21 - 08/07/24	14	93	CI around median	0.0002	0.002	Standard	No Exceedance
G285	LCU	E006	Molybdenum, total	mg/L	03/30/21 - 08/07/24	14	0	CB around linear reg	0.000657	0.1	Standard	No Exceedance
G285	LCU	E006	pH (field)	SU	03/30/21 - 08/07/24	14	0	CB around T-S line	6.3/6.7	6.5/9.0	Standard/Standard	No Exceedance
G285	LCU	E006	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/07/24	14	0	CI around geomean	1.27	5	Standard	No Exceedance
G285	LCU	E006	Selenium, total	mg/L	03/30/21 - 08/07/24	14	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G285	LCU	E006	Sulfate, total	mg/L	03/30/21 - 08/07/24	14	0	CB around linear reg	628	400	Standard	Exceedance
G285	LCU	E006	Thallium, total	mg/L	03/30/21 - 08/07/24	14	93	CB around T-S line	0.001	0.002	Standard	No Exceedance
G285	LCU	E006	Total Dissolved Solids	mg/L	03/30/21 - 08/07/24	14	0	CI around mean	1,460	1,200	Standard	Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF RECYCLE 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

LCU = Lower Confining Unit

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 |
| | CCR SOURCE WATER SAMPLE | | LIMITS OF FINAL COVER |
| | CLOSED STAFF GAGE | | PROPERTY BOUNDARY |

0 150 300 Feet

MONITORING WELL LOCATION MAP

GMF RECYCLE POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- TOTAL CHLORIDE EXCEEDANCE

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 RECYCLE POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

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
LOWER CONFINING UNIT
QUARTER 4, 2023 AND QUARTERS 1-3, 2024

FIGURE 3

0 275 550
Feet

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF RECYCLE 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 4

0 275 550
Feet

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF RECYCLE 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)

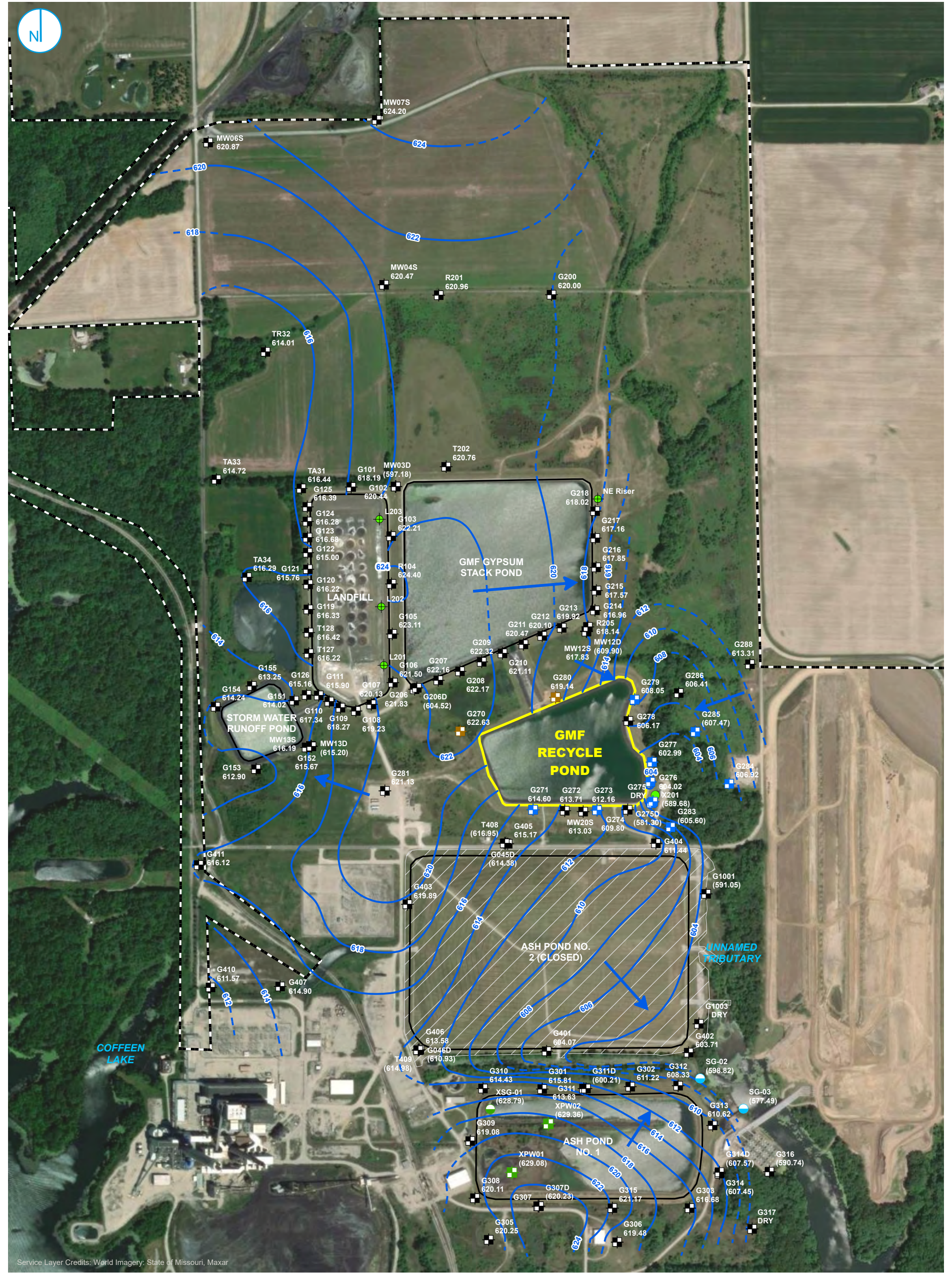
POTENTIOMETRIC SURFACE MAP
JANUARY 12, 2024

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

FIGURE 5

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
FEBRUARY 12 AND 13, 2024

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

FIGURE 6

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- 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 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

MARCH 29, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT

GMF RECYCLE POND

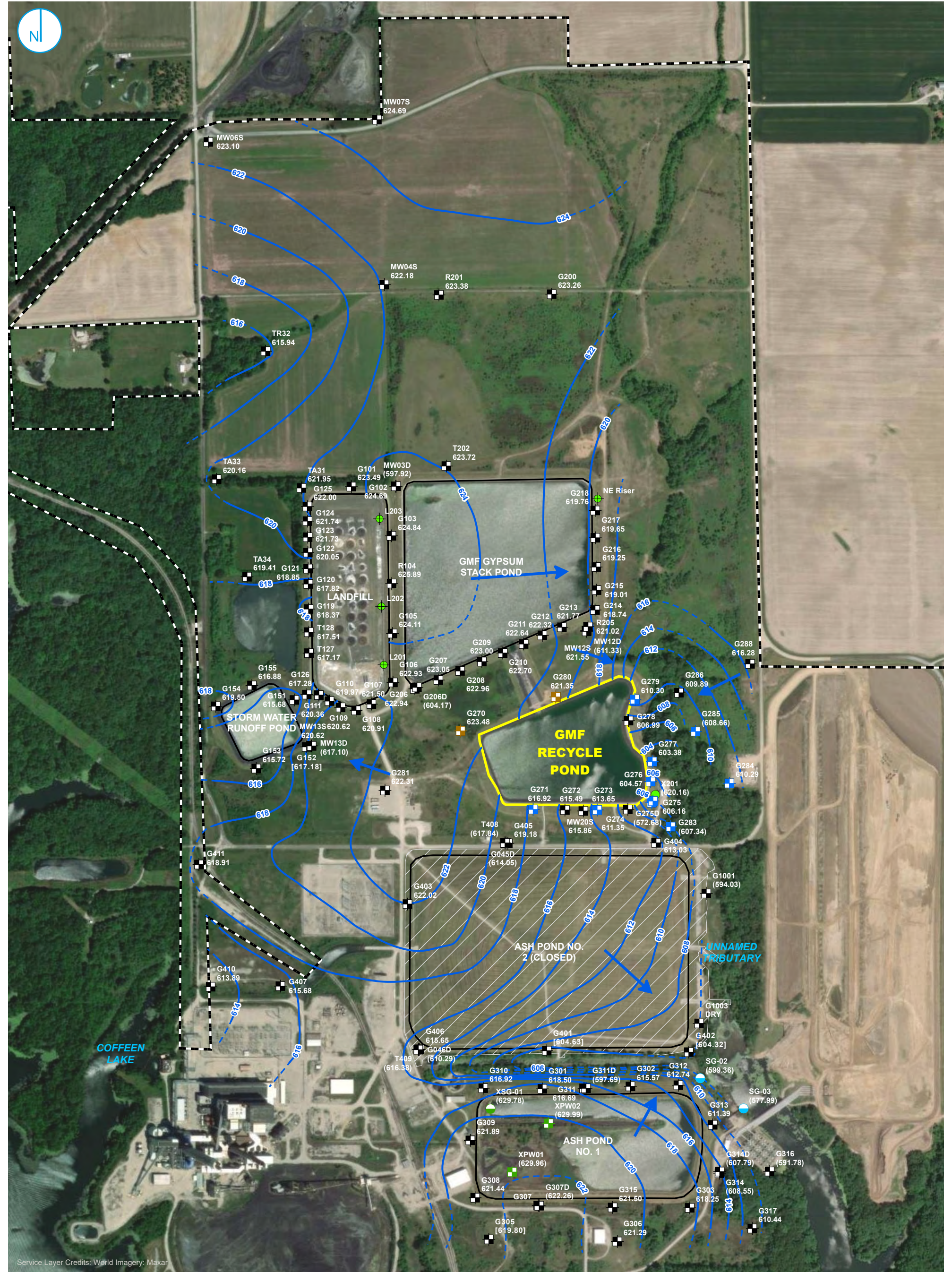
COFFEEN POWER PLANT

COFFEEN, ILLINOIS

FIGURE 7

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- COMPLIANCE MONITORING WELL

BACKGROUND MONITORING WELL

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:

- ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
- ELEVATIONS IN BRACKETS WERE OBTAINED OUTSIDE OF THE 24 HOUR PERIOD FROM INITIATION OF DEPTH TO GROUNDWATER MEASUREMENTS BUT WITHIN THE SAME SAMPLING EVENT.
- ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

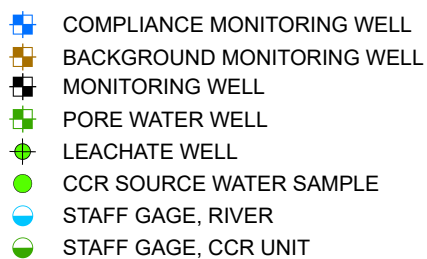
POTENTIOMETRIC SURFACE MAP
APRIL 29, 2024

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

FIGURE 8

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





 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

**2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT**
GMF RECYCLE POND
COFFEEEN POWER PLANT
COFFEEEN, ILLINOIS



FIGURE 9

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

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 RECYCLE 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).

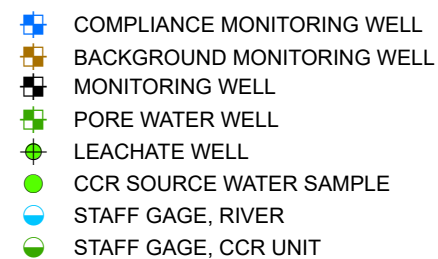
POTENTIOMETRIC SURFACE MAP
JULY 29 AND 30, 2024

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

FIGURE 11

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

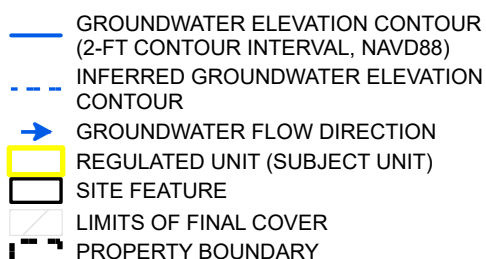




POTENTIOMETRIC SURFACE MAP

AUGUST 28, 2024

FIGURE 12



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





- 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

POTENTIOMETRIC SURFACE MAP
OCTOBER 28 AND 29, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF RECYCLE 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

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

NOVEMBER 19, 2024

2024 ANNUAL GROUNDWATER MONITORING

AND CORRECTIVE ACTION REPORT

GMF RECYCLE POND

COFFEEN POWER PLANT

COFFEEN, ILLINOIS

FIGURE 15

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL



- 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
DECEMBER 11-13, 2024

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

FIGURE 16

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



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 RECYCLE POND
COFFEEN, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G270	Background	UA	01/12/2024	4.70	620.72
G270	Background	UA	02/12/2024	2.80	622.63
G270	Background	UA	03/29/2024	2.18	623.24
G270	Background	UA	04/29/2024	1.95	623.48
G270	Background	UA	05/29/2024	2.71	622.95
G270	Background	UA	06/29/2024	8.14	617.52
G270	Background	UA	07/29/2024	7.23	618.20
G270	Background	UA	08/28/2024	9.36	616.31
G270	Background	UA	09/28/2024	9.36	616.31
G270	Background	UA	10/28/2024	11.10	614.57
G270	Background	UA	11/19/2024	3.99	621.67
G270	Background	UA	12/12/2024	5.25	620.42
G271	Compliance	UA	01/12/2024	10.79	614.54
G271	Compliance	UA	02/12/2024	10.74	614.60
G271	Compliance	UA	03/29/2024	9.34	615.99
G271	Compliance	UA	04/29/2024	8.42	616.92
G271	Compliance	UA	05/29/2024	9.59	615.95
G271	Compliance	UA	06/29/2024	11.45	614.09
G271	Compliance	UA	07/29/2024	10.84	614.50
G271	Compliance	UA	08/28/2024	DM ⁷	
G271	Compliance	UA	09/28/2024	DM ⁷	
G271	Compliance	UA	10/28/2024	12.42	613.13
G271	Compliance	UA	11/19/2024	11.02	614.53
G271	Compliance	UA	12/12/2024	11.94	613.61
G273	Compliance	UA	01/12/2024	10.44	612.21
G273	Compliance	UA	02/12/2024	10.50	612.16
G273	Compliance	UA	03/29/2024	9.40	613.25
G273	Compliance	UA	04/29/2024	9.01	613.65
G273	Compliance	UA	05/29/2024	DM ⁷	
G273	Compliance	UA	06/29/2024	DM ⁷	
G273	Compliance	UA	07/30/2024	10.91	611.75
G273	Compliance	UA	08/28/2024	DM ⁷	
G273	Compliance	UA	09/28/2024	DM ⁷	
G273	Compliance	UA	10/28/2024	12.11	610.59
G273	Compliance	UA	11/19/2024	DM ⁷	
G273	Compliance	UA	12/13/2024	11.78	610.92
G275	Compliance	UA	01/12/2024	DM ¹	
G275	Compliance	UA	02/12/2024	DM ⁴	
G275	Compliance	UA	03/29/2024	DM ¹	
G275	Compliance	UA	04/29/2024	12.10	606.16
G275	Compliance	UA	05/29/2024	DM ¹	
G275	Compliance	UA	06/29/2024	DM ¹	
G275	Compliance	UA	07/29/2024	DM ⁴	
G275	Compliance	UA	08/28/2024	DM ¹	
G275	Compliance	UA	09/28/2024	DM ¹	
G275	Compliance	UA	10/28/2024	Dry	

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

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G275	Compliance	UA	11/19/2024	DM ¹	
G275	Compliance	UA	12/12/2024	DM ¹	
G275D	Compliance	DA	01/12/2024	40.48	579.74
G275D	Compliance	DA	02/12/2024	38.93	581.30
G275D	Compliance	DA	03/29/2024	DM ¹	
G275D	Compliance	DA	04/29/2024	47.55	572.68
G275D	Compliance	DA	05/29/2024	44.96	575.18
G275D	Compliance	DA	06/29/2024	41.30	578.84
G275D	Compliance	DA	07/29/2024	39.81	580.42
G275D	Compliance	DA	08/28/2024	40.47	579.67
G275D	Compliance	DA	09/28/2024	38.59	581.54
G275D	Compliance	DA	10/28/2024	38.16	581.99
G275D	Compliance	DA	11/19/2024	42.28	577.86
G275D	Compliance	DA	12/12/2024	40.63	579.52
G276	Compliance	UA	01/12/2024	27.76	603.74
G276	Compliance	UA	02/12/2024	27.49	604.02
G276	Compliance	UA	03/29/2024	DM ⁷	
G276	Compliance	UA	04/29/2024	26.94	604.57
G276	Compliance	UA	05/29/2024	DM ⁷	
G276	Compliance	UA	06/29/2024	DM ⁷	
G276	Compliance	UA	07/30/2024	27.54	603.97
G276	Compliance	UA	08/28/2024	DM ⁷	
G276	Compliance	UA	09/28/2024	DM ⁷	
G276	Compliance	UA	10/28/2024	28.32	603.41
G276	Compliance	UA	11/19/2024	DM ⁷	
G276	Compliance	UA	12/13/2024	27.86	603.87
G277	Compliance	UA	01/12/2024	DM ¹	
G277	Compliance	UA	02/12/2024	20.09	602.99
G277	Compliance	UA	03/29/2024	DM ¹	
G277	Compliance	UA	04/29/2024	19.70	603.38
G277	Compliance	UA	05/29/2024	DM ¹	
G277	Compliance	UA	06/29/2024	DM ¹	
G277	Compliance	UA	07/29/2024	19.99	603.09
G277	Compliance	UA	08/28/2024	DM ¹	
G277	Compliance	UA	09/28/2024	DM ¹	
G277	Compliance	UA	10/28/2024	Dry	
G277	Compliance	UA	11/19/2024	DM ¹	
G277	Compliance	UA	12/12/2024	DM ¹	
G279	Compliance	UA	01/12/2024	DM ¹	
G279	Compliance	UA	02/12/2024	23.99	608.05
G279	Compliance	UA	03/29/2024	DM ¹	
G279	Compliance	UA	04/29/2024	21.74	610.30
G279	Compliance	UA	05/29/2024	DM ¹	
G279	Compliance	UA	06/29/2024	DM ¹	
G279	Compliance	UA	07/29/2024	21.12	610.92
G279	Compliance	UA	08/28/2024	DM ¹	

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

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G279	Compliance	UA	09/28/2024	DM ¹	
G279	Compliance	UA	10/28/2024	25.49	606.55
G279	Compliance	UA	11/19/2024	DM ¹	
G279	Compliance	UA	12/12/2024	DM ¹	
G280	Background	UA	01/12/2024	6.98	618.27
G280	Background	UA	02/12/2024	6.12	619.14
G280	Background	UA	03/29/2024	DM ⁷	
G280	Background	UA	04/29/2024	3.91	621.35
G280	Background	UA	05/29/2024	4.16	621.22
G280	Background	UA	06/29/2024	5.68	619.70
G280	Background	UA	07/29/2024	5.53	619.73
G280	Background	UA	08/28/2024	6.55	618.83
G280	Background	UA	09/28/2024	7.00	618.38
G280	Background	UA	10/28/2024	7.70	617.69
G280	Background	UA	11/19/2024	DM ⁷	
G280	Background	UA	12/13/2024	7.19	618.20
G283	Compliance	LCU	01/12/2024	DM ⁷	
G283	Compliance	LCU	02/12/2024	5.15	605.60
G283	Compliance	LCU	03/29/2024	4.30	606.44
G283	Compliance	LCU	04/29/2024	3.41	607.34
G283	Compliance	LCU	05/29/2024	4.13	606.65
G283	Compliance	LCU	06/29/2024	5.74	605.04
G283	Compliance	LCU	07/29/2024	5.27	605.48
G283	Compliance	LCU	08/28/2024	6.02	604.75
G283	Compliance	LCU	09/28/2024	4.98	605.80
G283	Compliance	LCU	10/28/2024	6.33	604.46
G283	Compliance	LCU	11/19/2024	DM ⁷	
G283	Compliance	LCU	12/12/2024	5.71	605.08
G284	Compliance	UA	01/12/2024	9.86	608.55
G284	Compliance	UA	02/12/2024	11.50	606.92
G284	Compliance	UA	03/29/2024	10.07	608.34
G284	Compliance	UA	04/29/2024	8.13	610.29
G284	Compliance	UA	05/29/2024	9.28	608.72
G284	Compliance	UA	06/29/2024	11.75	606.25
G284	Compliance	UA	07/29/2024	11.22	607.20
G284	Compliance	UA	08/28/2024	11.91	606.08
G284	Compliance	UA	09/28/2024	10.69	607.31
G284	Compliance	UA	10/28/2024	11.96	606.05
G284	Compliance	UA	11/19/2024	10.22	607.78
G284	Compliance	UA	12/12/2024	11.74	606.27
G285	Compliance	LCU	01/12/2024	5.77	607.74
G285	Compliance	LCU	02/12/2024	6.05	607.47
G285	Compliance	LCU	03/29/2024	5.13	608.38
G285	Compliance	LCU	04/29/2024	4.86	608.66
G285	Compliance	LCU	05/29/2024	5.37	608.00
G285	Compliance	LCU	06/29/2024	6.24	607.13

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G285	Compliance	LCU	07/29/2024	5.36	608.16
G285	Compliance	LCU	08/28/2024	6.11	607.25
G285	Compliance	LCU	09/28/2024	5.35	608.01
G285	Compliance	LCU	10/28/2024	6.22	607.16
G285	Compliance	LCU	11/19/2024	6.58	606.79
G285	Compliance	LCU	12/12/2024	6.42	606.96
X201	Water Level	S	01/12/2024	NA	617.79
X201	Water Level	S	02/12/2024	28.79	618.89
X201	Water Level	S	03/29/2024	NA	619.16
X201	Water Level	S	04/29/2024	22.55	620.16
X201	Water Level	S	05/29/2024	DM ⁷	
X201	Water Level	S	06/29/2024	DM ⁷	
X201	Water Level	S	07/29/2024	22.78	NA
X201	Water Level	S	08/28/2024	DM ⁷	
X201	Water Level	S	09/28/2024	DM ⁷	
X201	Water Level	S	10/29/2024	28.63	NA
X201	Water Level	S	11/19/2024	DM ¹	
X201	Water Level	S	12/12/2024	DM ¹	

Notes:
BMP = below measuring point
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
LCU = lower confining unit
S = source water
UA = uppermost aquifer

**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

JOHN J. KIM, DIRECTOR

217-782-1020

June 5, 2024

Dianna Tickner
Electric Energy, Inc.
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Re: Coffeen Power Plant GMF Recycle Pond; W1350150004-04
Alternative Source Demonstration Submittal

Dear Ms. Tickner:

The purpose of this correspondence is to notify you that the Illinois Environmental Protection Agency (Illinois EPA) does not concur with the Coffeen GMF Recycle Pond Alternative Source Demonstration (ASD) for arsenic on May 9, 2024.

The Illinois EPA does not concur due to the following data gaps:

- Arsenic from Ash Pond 1 and Ash Pond 2 has not been determined to not be impacting the deep aquifer at G275D.

If you have any questions, please contact: **Heather Mullenax** Illinois EPA, Bureau of Water, WPC #15, P.O. Box 19276, Springfield, Illinois 62794-9276. If you have any questions concerning the investigation described above, please call 217-782-1020.

Sincerely,

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

cc: Heather Mullenax
Lauren Hunt
Keegan MacDonna
Records Files 06M - W1350150004-04

2125 S. First Street, Champaign, IL 61820 (217) 278-5800
1101 Eastport Plaza Dr., Suite 100, Collinsville, IL 62234 (618) 346-5120
9511 Harrison Street, Des Plaines, IL 60016 (847) 294-4000
595 S. State Street, Elgin, IL 60123 (847) 608-3131

2309 W. Main Street, Suite 116, Marion, IL 62959 (618) 993-7200
412 SW Washington Street, Suite D, Peoria, IL 61602 (309) 671-3022
4302 N. Main Street, Rockford, IL 61103 (815) 987-7760

ATTACHMENT C
COMPARISON TO BACKGROUND

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G271	UA	E004	Antimony, total	mg/L	11/23/15 - 02/19/24	25	92	CB around T-S line	0.003	0.003
G271	UA	E004	Arsenic, total	mg/L	11/23/15 - 02/19/24	27	77	CI around median	0.001	0.00660
G271	UA	E004	Barium, total	mg/L	11/23/15 - 02/19/24	28	0	CB around T-S line	0.0157	0.110
G271	UA	E004	Beryllium, total	mg/L	11/23/15 - 02/19/24	25	97	CI around median	0.001	0.001
G271	UA	E004	Boron, total	mg/L	11/23/15 - 02/19/24	29	0	CI around geomean	0.681	1.00
G271	UA	E004	Cadmium, total	mg/L	11/23/15 - 02/19/24	25	98	CI around median	0.001	0.001
G271	UA	E004	Chloride, total	mg/L	11/23/15 - 02/19/24	29	0	CB around linear reg	46.1	67.0
G271	UA	E004	Chromium, total	mg/L	11/23/15 - 02/19/24	27	80	CI around median	0.004	0.0190
G271	UA	E004	Cobalt, total	mg/L	11/23/15 - 02/19/24	27	87	CB around T-S line	0.00194	0.00590
G271	UA	E004	Fluoride, total	mg/L	11/23/15 - 02/19/24	29	7	CI around mean	0.333	0.564
G271	UA	E004	Lead, total	mg/L	11/23/15 - 02/19/24	28	61	CI around median	0.001	0.0120
G271	UA	E004	Lithium, total	mg/L	11/23/15 - 02/19/24	23	91	CI around median	0.01	0.0190
G271	UA	E004	Mercury, total	mg/L	11/23/15 - 02/19/24	25	100	All ND - Last	0.0002	0.0002
G271	UA	E004	Molybdenum, total	mg/L	11/23/15 - 02/19/24	28	70	CI around median	0.001	0.00450
G271	UA	E004	pH (field)	SU	11/23/15 - 02/19/24	31	0	CI around mean	7.1/7.3	6.6/7.6
G271	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/23/15 - 02/19/24	23	0	CI around geomean	0.384	1.60
G271	UA	E004	Selenium, total	mg/L	11/23/15 - 02/19/24	27	8	CI around mean	0.00149	0.00480
G271	UA	E004	Sulfate, total	mg/L	11/23/15 - 02/19/24	29	0	CB around T-S line	182	94.0
G271	UA	E004	Thallium, total	mg/L	11/23/15 - 02/19/24	26	97	CI around median	0.001	0.001
G271	UA	E004	Total Dissolved Solids	mg/L	11/23/15 - 02/19/24	29	0	CB around linear reg	637	551
G273	UA	E004	Antimony, total	mg/L	11/24/15 - 02/19/24	25	95	CB around T-S line	0.003	0.003
G273	UA	E004	Arsenic, total	mg/L	11/24/15 - 02/19/24	28	85	CI around median	0.001	0.00660
G273	UA	E004	Barium, total	mg/L	11/24/15 - 02/19/24	28	0	CI around median	0.029	0.110
G273	UA	E004	Beryllium, total	mg/L	11/24/15 - 02/19/24	25	100	All ND - Last	0.001	0.001
G273	UA	E004	Boron, total	mg/L	11/24/15 - 02/19/24	29	6	CB around T-S line	-0.0583	1.00
G273	UA	E004	Cadmium, total	mg/L	11/24/15 - 02/19/24	25	98	CI around median	0.001	0.001
G273	UA	E004	Chloride, total	mg/L	11/24/15 - 02/19/24	29	0	CB around T-S line	69.9	67.0

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G273	UA	E004	Chromium, total	mg/L	11/24/15 - 02/19/24	27	97	CB around T-S line	0.004	0.0190
G273	UA	E004	Cobalt, total	mg/L	11/24/15 - 02/19/24	27	97	CB around T-S line	0.00197	0.00590
G273	UA	E004	Fluoride, total	mg/L	11/24/15 - 02/19/24	29	17	CI around mean	0.302	0.564
G273	UA	E004	Lead, total	mg/L	11/24/15 - 02/19/24	28	89	CI around median	0.001	0.0120
G273	UA	E004	Lithium, total	mg/L	11/24/15 - 02/19/24	23	78	CI around median	0.01	0.0190
G273	UA	E004	Mercury, total	mg/L	11/24/15 - 02/19/24	25	100	All ND - Last	0.0002	0.0002
G273	UA	E004	Molybdenum, total	mg/L	11/24/15 - 02/19/24	28	90	CI around median	0.001	0.00450
G273	UA	E004	pH (field)	SU	11/24/15 - 02/19/24	31	0	CI around mean	7.0/7.1	6.6/7.6
G273	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 02/19/24	23	0	CI around median	0.226	1.60
G273	UA	E004	Selenium, total	mg/L	11/24/15 - 02/19/24	28	95	CI around median	0.001	0.00480
G273	UA	E004	Sulfate, total	mg/L	11/24/15 - 02/19/24	29	0	CI around median	410	94.0
G273	UA	E004	Thallium, total	mg/L	11/24/15 - 02/19/24	26	95	CI around median	0.001	0.001
G273	UA	E004	Total Dissolved Solids	mg/L	11/24/15 - 02/19/24	29	0	CB around linear reg	1,020	551
G275	UA	E004	Antimony, total	mg/L	10/14/20 - 02/19/24	10	95	CI around median	0.003	0.003
G275	UA	E004	Arsenic, total	mg/L	10/14/20 - 02/19/24	10	56	CI around median	0.001	0.00660
G275	UA	E004	Barium, total	mg/L	10/14/20 - 02/19/24	10	0	CI around geomean	0.024	0.110
G275	UA	E004	Beryllium, total	mg/L	10/14/20 - 02/19/24	10	100	All ND - Last	0.001	0.001
G275	UA	E004	Boron, total	mg/L	10/14/20 - 02/19/24	10	0	CI around mean	1.51	1.00
G275	UA	E004	Cadmium, total	mg/L	10/14/20 - 02/19/24	10	100	All ND - Last	0.001	0.001
G275	UA	E004	Chloride, total	mg/L	10/14/20 - 02/19/24	10	0	CI around mean	17.6	67.0
G275	UA	E004	Chromium, total	mg/L	10/14/20 - 02/19/24	10	90	CI around median	0.004	0.0190
G275	UA	E004	Cobalt, total	mg/L	10/14/20 - 02/19/24	10	100	All ND - Last	0.001	0.00590
G275	UA	E004	Fluoride, total	mg/L	10/14/20 - 02/19/24	10	10	CI around mean	0.26	0.564
G275	UA	E004	Lead, total	mg/L	10/14/20 - 02/19/24	10	59	Most recent sample	0.001	0.0120
G275	UA	E004	Lithium, total	mg/L	06/08/23 - 02/19/24	2	50	Most recent sample	0.0093	0.0190
G275	UA	E004	Mercury, total	mg/L	10/14/20 - 02/19/24	10	100	All ND - Last	0.0002	0.0002
G275	UA	E004	Molybdenum, total	mg/L	10/14/20 - 02/19/24	10	91	CI around median	0.001	0.00450

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G275	UA	E004	pH (field)	SU	10/14/20 - 02/19/24	10	0	CI around mean	6.9/7.1	6.6/7.6
G275	UA	E004	Radium 226 + Radium 228, total	pCi/L	06/08/23 - 02/19/24	2	0	Most recent sample	0.0508	1.60
G275	UA	E004	Selenium, total	mg/L	10/14/20 - 02/19/24	10	84	Most recent sample	0.001	0.00480
G275	UA	E004	Sulfate, total	mg/L	10/14/20 - 02/19/24	10	0	CB around linear reg	185	94.0
G275	UA	E004	Thallium, total	mg/L	10/14/20 - 02/19/24	10	100	All ND - Last	0.002	0.001
G275	UA	E004	Total Dissolved Solids	mg/L	10/14/20 - 02/19/24	10	0	CI around mean	927	551
G275D	DA	E004	Antimony, total	mg/L	03/30/21 - 02/19/24	9	89	CI around median	0.001	0.003
G275D	DA	E004	Arsenic, total	mg/L	03/30/21 - 02/19/24	9	0	CB around linear reg	0.0147	0.00660
G275D	DA	E004	Barium, total	mg/L	03/30/21 - 02/19/24	9	0	CI around mean	0.322	0.110
G275D	DA	E004	Beryllium, total	mg/L	03/30/21 - 02/19/24	9	100	All ND - Last	0.001	0.001
G275D	DA	E004	Boron, total	mg/L	03/30/21 - 02/19/24	9	0	CI around geomean	0.195	1.00
G275D	DA	E004	Cadmium, total	mg/L	03/30/21 - 02/19/24	9	100	All ND - Last	0.001	0.001
G275D	DA	E004	Chloride, total	mg/L	03/30/21 - 02/19/24	9	0	CI around mean	20	67.0
G275D	DA	E004	Chromium, total	mg/L	03/30/21 - 02/19/24	9	78	CI around median	0.0015	0.0190
G275D	DA	E004	Cobalt, total	mg/L	03/30/21 - 02/19/24	9	67	CB around T-S line	-0.00687	0.00590
G275D	DA	E004	Fluoride, total	mg/L	03/30/21 - 02/19/24	9	0	CI around mean	0.391	0.564
G275D	DA	E004	Lead, total	mg/L	03/30/21 - 02/19/24	9	89	CI around median	0.001	0.0120
G275D	DA	E004	Lithium, total	mg/L	03/30/21 - 02/19/24	9	78	CI around median	0.0035	0.0190
G275D	DA	E004	Mercury, total	mg/L	03/30/21 - 02/19/24	9	100	All ND - Last	0.0002	0.0002
G275D	DA	E004	Molybdenum, total	mg/L	03/30/21 - 02/19/24	9	11	CB around linear reg	-0.00861	0.00450
G275D	DA	E004	pH (field)	SU	03/30/21 - 02/19/24	9	0	CI around mean	7.0/7.3	6.6/7.6
G275D	DA	E004	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 02/19/24	10	0	CI around mean	0.53	1.60
G275D	DA	E004	Selenium, total	mg/L	03/30/21 - 02/19/24	9	100	All ND - Last	0.001	0.00480
G275D	DA	E004	Sulfate, total	mg/L	03/30/21 - 02/19/24	9	0	CB around linear reg	54.5	94.0
G275D	DA	E004	Thallium, total	mg/L	03/30/21 - 02/19/24	9	100	All ND - Last	0.002	0.001
G275D	DA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/19/24	9	0	CI around median	840	551
G276	UA	E004	Antimony, total	mg/L	11/24/15 - 02/20/24	25	97	CB around T-S line	0.00242	0.003

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G276	UA	E004	Arsenic, total	mg/L	11/24/15 - 02/20/24	28	84	CI around median	0.001	0.00660
G276	UA	E004	Barium, total	mg/L	11/24/15 - 02/20/24	28	0	CB around T-S line	0.0323	0.110
G276	UA	E004	Beryllium, total	mg/L	11/24/15 - 02/20/24	25	94	Most recent sample	0.001	0.001
G276	UA	E004	Boron, total	mg/L	11/24/15 - 02/20/24	29	12	CI around geomean	0.0173	1.00
G276	UA	E004	Cadmium, total	mg/L	11/24/15 - 02/20/24	25	100	All ND - Last	0.001	0.001
G276	UA	E004	Chloride, total	mg/L	11/24/15 - 02/20/24	29	0	CI around median	22	67.0
G276	UA	E004	Chromium, total	mg/L	11/24/15 - 02/20/24	27	84	CI around median	0.004	0.0190
G276	UA	E004	Cobalt, total	mg/L	11/24/15 - 02/20/24	27	97	CB around T-S line	0.002	0.00590
G276	UA	E004	Fluoride, total	mg/L	11/24/15 - 02/20/24	29	5	CI around median	0.355	0.564
G276	UA	E004	Lead, total	mg/L	11/24/15 - 02/20/24	28	78	CI around median	0.001	0.0120
G276	UA	E004	Lithium, total	mg/L	11/24/15 - 02/20/24	23	44	CI around median	0.012	0.0190
G276	UA	E004	Mercury, total	mg/L	11/24/15 - 02/20/24	25	100	All ND - Last	0.0002	0.0002
G276	UA	E004	Molybdenum, total	mg/L	11/24/15 - 02/20/24	28	79	CI around median	0.001	0.00450
G276	UA	E004	pH (field)	SU	11/24/15 - 02/20/24	30	0	CB around linear reg	6.7/7.0	6.6/7.6
G276	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 02/20/24	23	0	CI around geomean	0.371	1.60
G276	UA	E004	Selenium, total	mg/L	11/24/15 - 02/20/24	28	37	CB around linear reg	0.000731	0.00480
G276	UA	E004	Sulfate, total	mg/L	11/24/15 - 02/20/24	29	0	CB around T-S line	252	94.0
G276	UA	E004	Thallium, total	mg/L	11/24/15 - 02/20/24	26	100	All ND - Last	0.002	0.001
G276	UA	E004	Total Dissolved Solids	mg/L	11/24/15 - 02/20/24	29	0	CB around T-S line	853	551
G277	UA	E004	Antimony, total	mg/L	10/14/20 - 02/20/24	11	100	All ND - Last	0.001	0.003
G277	UA	E004	Arsenic, total	mg/L	10/14/20 - 02/20/24	11	59	CI around median	0.001	0.00660
G277	UA	E004	Barium, total	mg/L	10/14/20 - 02/20/24	11	0	CB around linear reg	0.0122	0.110
G277	UA	E004	Beryllium, total	mg/L	10/14/20 - 02/20/24	11	89	Most recent sample	0.001	0.001
G277	UA	E004	Boron, total	mg/L	10/14/20 - 02/20/24	11	14	CB around linear reg	0.0978	1.00
G277	UA	E004	Cadmium, total	mg/L	10/14/20 - 02/20/24	11	100	All ND - Last	0.001	0.001
G277	UA	E004	Chloride, total	mg/L	10/14/20 - 02/20/24	11	0	CI around mean	63.8	67.0
G277	UA	E004	Chromium, total	mg/L	10/14/20 - 02/20/24	11	56	CI around median	0.004	0.0190

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G277	UA	E004	Cobalt, total	mg/L	10/14/20 - 02/20/24	11	78	CI around median	0.002	0.00590
G277	UA	E004	Fluoride, total	mg/L	10/14/20 - 02/20/24	11	11	CI around median	0.125	0.564
G277	UA	E004	Lead, total	mg/L	10/14/20 - 02/20/24	11	55	CI around median	0.001	0.0120
G277	UA	E004	Lithium, total	mg/L	06/01/23 - 02/20/24	2	50	Most recent sample	0.0094	0.0190
G277	UA	E004	Mercury, total	mg/L	10/14/20 - 02/20/24	11	94	Most recent sample	0.0002	0.0002
G277	UA	E004	Molybdenum, total	mg/L	10/14/20 - 02/20/24	11	100	All ND - Last	0.0015	0.00450
G277	UA	E004	pH (field)	SU	10/14/20 - 02/20/24	11	0	CI around mean	6.7/7.1	6.6/7.6
G277	UA	E004	Radium 226 + Radium 228, total	pCi/L	06/01/23 - 02/20/24	2	0	Most recent sample	0.149	1.60
G277	UA	E004	Selenium, total	mg/L	10/14/20 - 02/20/24	11	61	CI around median	0.001	0.00480
G277	UA	E004	Sulfate, total	mg/L	10/14/20 - 02/20/24	11	0	CB around linear reg	381	94.0
G277	UA	E004	Thallium, total	mg/L	10/14/20 - 02/20/24	11	100	All ND - Last	0.002	0.001
G277	UA	E004	Total Dissolved Solids	mg/L	10/14/20 - 02/20/24	11	0	CI around mean	934	551
G279	UA	E004	Antimony, total	mg/L	11/24/15 - 02/20/24	25	100	All ND - Last	0.001	0.003
G279	UA	E004	Arsenic, total	mg/L	11/24/15 - 02/20/24	28	80	CI around median	0.001	0.00660
G279	UA	E004	Barium, total	mg/L	11/24/15 - 02/20/24	28	0	CB around linear reg	0.0272	0.110
G279	UA	E004	Beryllium, total	mg/L	11/24/15 - 02/20/24	25	100	All ND - Last	0.001	0.001
G279	UA	E004	Boron, total	mg/L	11/24/15 - 02/20/24	29	20	CB around linear reg	1.23	1.00
G279	UA	E004	Cadmium, total	mg/L	11/24/15 - 02/20/24	25	100	All ND - Last	0.001	0.001
G279	UA	E004	Chloride, total	mg/L	11/24/15 - 02/20/24	29	0	CB around linear reg	216	67.0
G279	UA	E004	Chromium, total	mg/L	11/24/15 - 02/20/24	27	90	CI around median	0.004	0.0190
G279	UA	E004	Cobalt, total	mg/L	11/24/15 - 02/20/24	27	87	CI around median	0.002	0.00590
G279	UA	E004	Fluoride, total	mg/L	11/24/15 - 02/20/24	29	7	CI around mean	0.339	0.564
G279	UA	E004	Lead, total	mg/L	11/24/15 - 02/20/24	28	83	CI around median	0.001	0.0120
G279	UA	E004	Lithium, total	mg/L	11/24/15 - 02/20/24	28	71	CB around T-S line	0.0156	0.0190
G279	UA	E004	Mercury, total	mg/L	11/24/15 - 02/20/24	25	97	Most recent sample	0.0002	0.0002
G279	UA	E004	Molybdenum, total	mg/L	11/24/15 - 02/20/24	28	87	CI around median	0.001	0.00450
G279	UA	E004	pH (field)	SU	11/24/15 - 02/20/24	29	0	CB around linear reg	6.5/6.8	6.6/7.6

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G279	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 02/20/24	28	0	CI around mean	0.639	1.60
G279	UA	E004	Selenium, total	mg/L	11/24/15 - 02/20/24	28	20	CB around linear reg	-0.00398	0.00480
G279	UA	E004	Sulfate, total	mg/L	11/24/15 - 02/20/24	29	0	CI around geomean	408	94.0
G279	UA	E004	Thallium, total	mg/L	11/24/15 - 02/20/24	26	100	All ND - Last	0.002	0.001
G279	UA	E004	Total Dissolved Solids	mg/L	11/24/15 - 02/20/24	29	0	CB around linear reg	2,680	551
G283	LCU	E004	Antimony, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.001	0.003
G283	LCU	E004	Arsenic, total	mg/L	03/31/21 - 02/21/24	12	58	CI around median	0.001	0.00660
G283	LCU	E004	Barium, total	mg/L	03/31/21 - 02/21/24	12	0	CI around mean	0.161	0.110
G283	LCU	E004	Beryllium, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.001	0.001
G283	LCU	E004	Boron, total	mg/L	03/31/21 - 02/21/24	12	0	CB around linear reg	0.0439	1.00
G283	LCU	E004	Cadmium, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.001	0.001
G283	LCU	E004	Chloride, total	mg/L	03/31/21 - 02/21/24	12	0	CI around mean	37.7	67.0
G283	LCU	E004	Chromium, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.0015	0.0190
G283	LCU	E004	Cobalt, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.001	0.00590
G283	LCU	E004	Fluoride, total	mg/L	03/31/21 - 02/21/24	12	17	CI around mean	0.303	0.564
G283	LCU	E004	Lead, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.001	0.0120
G283	LCU	E004	Lithium, total	mg/L	03/31/21 - 02/21/24	12	75	CB around T-S line	0.00941	0.0190
G283	LCU	E004	Mercury, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.0002	0.0002
G283	LCU	E004	Molybdenum, total	mg/L	03/31/21 - 02/21/24	12	0	CI around geomean	0.00157	0.00450
G283	LCU	E004	pH (field)	SU	03/31/21 - 02/21/24	12	0	CI around mean	7.0/7.1	6.6/7.6
G283	LCU	E004	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 02/21/24	12	0	CI around geomean	0.545	1.60
G283	LCU	E004	Selenium, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.001	0.00480
G283	LCU	E004	Sulfate, total	mg/L	03/31/21 - 02/21/24	12	0	CI around mean	239	94.0
G283	LCU	E004	Thallium, total	mg/L	03/31/21 - 02/21/24	12	100	All ND - Last	0.002	0.001
G283	LCU	E004	Total Dissolved Solids	mg/L	03/31/21 - 02/21/24	12	0	CI around mean	785	551
G284	UA	E004	Antimony, total	mg/L	03/30/21 - 02/20/24	11	100	All ND - Last	0.001	0.003
G284	UA	E004	Arsenic, total	mg/L	03/30/21 - 02/20/24	11	91	Most recent sample	0.001	0.00660

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G284	UA	E004	Barium, total	mg/L	03/30/21 - 02/20/24	11	0	CI around median	0.063	0.110
G284	UA	E004	Beryllium, total	mg/L	03/30/21 - 02/20/24	11	100	All ND - Last	0.001	0.001
G284	UA	E004	Boron, total	mg/L	03/30/21 - 02/20/24	11	0	CI around geomean	0.0397	1.00
G284	UA	E004	Cadmium, total	mg/L	03/30/21 - 02/20/24	11	100	All ND - Last	0.001	0.001
G284	UA	E004	Chloride, total	mg/L	03/30/21 - 02/20/24	11	0	CI around mean	35.5	67.0
G284	UA	E004	Chromium, total	mg/L	03/30/21 - 02/20/24	11	100	All ND - Last	0.0015	0.0190
G284	UA	E004	Cobalt, total	mg/L	03/30/21 - 02/20/24	11	100	All ND - Last	0.001	0.00590
G284	UA	E004	Fluoride, total	mg/L	03/30/21 - 02/20/24	11	0	CI around mean	0.487	0.564
G284	UA	E004	Lead, total	mg/L	03/30/21 - 02/20/24	11	100	All ND - Last	0.001	0.0120
G284	UA	E004	Lithium, total	mg/L	03/30/21 - 02/20/24	11	82	CI around median	0.0134	0.0190
G284	UA	E004	Mercury, total	mg/L	03/30/21 - 02/20/24	11	100	All ND - Last	0.0002	0.0002
G284	UA	E004	Molybdenum, total	mg/L	03/30/21 - 02/20/24	11	36	CI around median	0.001	0.00450
G284	UA	E004	pH (field)	SU	03/30/21 - 02/20/24	11	0	CI around mean	7.1/7.3	6.6/7.6
G284	UA	E004	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 02/20/24	11	0	CI around mean	0.124	1.60
G284	UA	E004	Selenium, total	mg/L	03/30/21 - 02/20/24	11	82	CI around median	0.001	0.00480
G284	UA	E004	Sulfate, total	mg/L	03/30/21 - 02/20/24	11	0	CI around median	63	94.0
G284	UA	E004	Thallium, total	mg/L	03/30/21 - 02/20/24	11	100	All ND - Last	0.002	0.001
G284	UA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/20/24	11	0	CI around mean	445	551
G285	LCU	E004	Antimony, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.003
G285	LCU	E004	Arsenic, total	mg/L	03/30/21 - 02/20/24	12	67	CI around median	0.001	0.00660
G285	LCU	E004	Barium, total	mg/L	03/30/21 - 02/20/24	12	0	CB around linear reg	0.0204	0.110
G285	LCU	E004	Beryllium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.001
G285	LCU	E004	Boron, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.11	1.00
G285	LCU	E004	Cadmium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.001
G285	LCU	E004	Chloride, total	mg/L	03/30/21 - 02/20/24	12	0	CB around linear reg	2.82	67.0
G285	LCU	E004	Chromium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0015	0.0190
G285	LCU	E004	Cobalt, total	mg/L	03/30/21 - 02/20/24	12	25	CI around mean	0.0017	0.00590

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G285	LCU	E004	Fluoride, total	mg/L	03/30/21 - 02/20/24	12	25	CI around mean	0.276	0.564
G285	LCU	E004	Lead, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.0120
G285	LCU	E004	Lithium, total	mg/L	03/30/21 - 02/20/24	12	75	CI around median	0.0051	0.0190
G285	LCU	E004	Mercury, total	mg/L	03/30/21 - 02/20/24	12	92	CI around median	0.0002	0.0002
G285	LCU	E004	Molybdenum, total	mg/L	03/30/21 - 02/20/24	12	0	CB around linear reg	0.000592	0.00450
G285	LCU	E004	pH (field)	SU	03/30/21 - 02/20/24	12	0	CI around median	6.7/6.9	6.6/7.6
G285	LCU	E004	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 02/20/24	12	0	CI around geomean	1.24	1.60
G285	LCU	E004	Selenium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.00480
G285	LCU	E004	Sulfate, total	mg/L	03/30/21 - 02/20/24	12	0	CB around linear reg	586	94.0
G285	LCU	E004	Thallium, total	mg/L	03/30/21 - 02/20/24	12	92	CB around T-S line	0.001	0.001
G285	LCU	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	1,440	551

Notes:
Lower Confidence Limit (LCL) or Upper Confidence Limit (UCL) exceeded the statistical background value
HSU = hydrostratigraphic unit:
 DA = Deep Aquifer
 LCU = Lower Confining Unit
 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 RECYCLE POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G271	UA	E005	Antimony, total	mg/L	11/23/15 - 05/01/24	26	92	CB around T-S line	0.00292	0.003
G271	UA	E005	Arsenic, total	mg/L	11/23/15 - 05/01/24	28	78	CI around median	0.001	0.00660
G271	UA	E005	Barium, total	mg/L	11/23/15 - 05/01/24	29	0	CB around T-S line	0.0152	0.110
G271	UA	E005	Beryllium, total	mg/L	11/23/15 - 05/01/24	26	97	CI around median	0.001	0.001
G271	UA	E005	Boron, total	mg/L	11/23/15 - 05/01/24	30	0	CI around geomean	0.678	1.00
G271	UA	E005	Cadmium, total	mg/L	11/23/15 - 05/01/24	26	98	CI around median	0.001	0.001
G271	UA	E005	Chloride, total	mg/L	11/23/15 - 05/01/24	30	0	CB around linear reg	47.8	67.0
G271	UA	E005	Chromium, total	mg/L	11/23/15 - 05/01/24	28	78	CI around median	0.004	0.0190
G271	UA	E005	Cobalt, total	mg/L	11/23/15 - 05/01/24	28	88	CB around T-S line	0.00184	0.00590
G271	UA	E005	Fluoride, total	mg/L	11/23/15 - 05/01/24	30	7	CI around mean	0.335	0.564
G271	UA	E005	Lead, total	mg/L	11/23/15 - 05/01/24	29	62	CI around median	0.001	0.0120
G271	UA	E005	Lithium, total	mg/L	11/23/15 - 05/01/24	24	92	CI around median	0.01	0.0190
G271	UA	E005	Mercury, total	mg/L	11/23/15 - 05/01/24	26	100	All ND - Last	0.0002	0.0002
G271	UA	E005	Molybdenum, total	mg/L	11/23/15 - 05/01/24	29	71	CI around median	0.001	0.00450
G271	UA	E005	pH (field)	SU	11/23/15 - 05/01/24	32	0	CI around mean	7.1/7.3	6.6/7.6
G271	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/23/15 - 05/01/24	24	0	CI around geomean	0.383	1.60
G271	UA	E005	Selenium, total	mg/L	11/23/15 - 05/01/24	28	8	CI around mean	0.00149	0.00480
G271	UA	E005	Sulfate, total	mg/L	11/23/15 - 05/01/24	30	0	CB around T-S line	175	94.0
G271	UA	E005	Thallium, total	mg/L	11/23/15 - 05/01/24	27	97	CI around median	0.001	0.001
G271	UA	E005	Total Dissolved Solids	mg/L	11/23/15 - 05/01/24	30	0	CB around linear reg	635	551
G273	UA	E005	Antimony, total	mg/L	11/24/15 - 05/01/24	26	95	CB around T-S line	0.00254	0.003
G273	UA	E005	Arsenic, total	mg/L	11/24/15 - 05/01/24	29	86	CI around median	0.001	0.00660
G273	UA	E005	Barium, total	mg/L	11/24/15 - 05/01/24	29	0	CI around median	0.029	0.110
G273	UA	E005	Beryllium, total	mg/L	11/24/15 - 05/01/24	26	100	All ND - Last	0.001	0.001
G273	UA	E005	Boron, total	mg/L	11/24/15 - 05/01/24	30	5	CB around T-S line	-0.0388	1.00
G273	UA	E005	Cadmium, total	mg/L	11/24/15 - 05/01/24	26	98	CI around median	0.001	0.001
G273	UA	E005	Chloride, total	mg/L	11/24/15 - 05/01/24	30	0	CB around T-S line	68.8	67.0

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G273	UA	E005	Chromium, total	mg/L	11/24/15 - 05/01/24	28	95	CB around T-S line	0.004	0.0190
G273	UA	E005	Cobalt, total	mg/L	11/24/15 - 05/01/24	28	98	CB around T-S line	0.0019	0.00590
G273	UA	E005	Fluoride, total	mg/L	11/24/15 - 05/01/24	30	17	CI around mean	0.302	0.564
G273	UA	E005	Lead, total	mg/L	11/24/15 - 05/01/24	29	89	CI around median	0.001	0.0120
G273	UA	E005	Lithium, total	mg/L	11/24/15 - 05/01/24	24	75	CI around median	0.01	0.0190
G273	UA	E005	Mercury, total	mg/L	11/24/15 - 05/01/24	26	100	All ND - Last	0.0002	0.0002
G273	UA	E005	Molybdenum, total	mg/L	11/24/15 - 05/01/24	29	90	CI around median	0.001	0.00450
G273	UA	E005	pH (field)	SU	11/24/15 - 05/01/24	32	0	CI around mean	7.0/7.1	6.6/7.6
G273	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 05/01/24	24	0	CI around mean	0.361	1.60
G273	UA	E005	Selenium, total	mg/L	11/24/15 - 05/01/24	29	95	CI around median	0.001	0.00480
G273	UA	E005	Sulfate, total	mg/L	11/24/15 - 05/01/24	30	0	CI around median	410	94.0
G273	UA	E005	Thallium, total	mg/L	11/24/15 - 05/01/24	27	95	CI around median	0.001	0.001
G273	UA	E005	Total Dissolved Solids	mg/L	11/24/15 - 05/01/24	30	0	CB around linear reg	1,040	551
G275	UA	E005	Antimony, total	mg/L	10/14/20 - 05/02/24	11	95	CI around median	0.0021	0.003
G275	UA	E005	Arsenic, total	mg/L	10/14/20 - 05/02/24	11	54	CI around median	0.001	0.00660
G275	UA	E005	Barium, total	mg/L	10/14/20 - 05/02/24	11	0	CI around geomean	0.0247	0.110
G275	UA	E005	Beryllium, total	mg/L	10/14/20 - 05/02/24	11	100	All ND - Last	0.001	0.001
G275	UA	E005	Boron, total	mg/L	10/14/20 - 05/02/24	11	0	CI around mean	1.51	1.00
G275	UA	E005	Cadmium, total	mg/L	10/14/20 - 05/02/24	11	100	All ND - Last	0.001	0.001
G275	UA	E005	Chloride, total	mg/L	10/14/20 - 05/02/24	11	0	CI around mean	16.2	67.0
G275	UA	E005	Chromium, total	mg/L	10/14/20 - 05/02/24	11	85	CI around median	0.004	0.0190
G275	UA	E005	Cobalt, total	mg/L	10/14/20 - 05/02/24	11	95	CI around median	0.001	0.00590
G275	UA	E005	Fluoride, total	mg/L	10/14/20 - 05/02/24	11	10	CI around mean	0.272	0.564
G275	UA	E005	Lead, total	mg/L	10/14/20 - 05/02/24	11	58	CI around median	0.001	0.0120
G275	UA	E005	Lithium, total	mg/L	06/08/23 - 05/02/24	3	33	Most recent sample	0.0077	0.0190
G275	UA	E005	Mercury, total	mg/L	10/14/20 - 05/02/24	11	100	All ND - Last	0.0002	0.0002
G275	UA	E005	Molybdenum, total	mg/L	10/14/20 - 05/02/24	11	92	CI around median	0.001	0.00450

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G275	UA	E005	pH (field)	SU	10/14/20 - 05/02/24	11	0	CI around mean	6.9/7.1	6.6/7.6
G275	UA	E005	Radium 226 + Radium 228, total	pCi/L	06/08/23 - 05/02/24	3	0	Most recent sample	0.223	1.60
G275	UA	E005	Selenium, total	mg/L	10/14/20 - 05/02/24	11	80	CI around median	0.001	0.00480
G275	UA	E005	Sulfate, total	mg/L	10/14/20 - 05/02/24	11	0	CB around linear reg	184	94.0
G275	UA	E005	Thallium, total	mg/L	10/14/20 - 05/02/24	11	100	All ND - Last	0.002	0.001
G275	UA	E005	Total Dissolved Solids	mg/L	10/14/20 - 05/02/24	11	0	CI around mean	893	551
G275D	DA	E005	Antimony, total	mg/L	03/30/21 - 05/02/24	10	90	CB around T-S line	0.00046	0.003
G275D	DA	E005	Arsenic, total	mg/L	03/30/21 - 05/02/24	10	0	CB around linear reg	0.0141	0.00660
G275D	DA	E005	Barium, total	mg/L	03/30/21 - 05/02/24	10	0	CI around mean	0.337	0.110
G275D	DA	E005	Beryllium, total	mg/L	03/30/21 - 05/02/24	10	100	All ND - Last	0.001	0.001
G275D	DA	E005	Boron, total	mg/L	03/30/21 - 05/02/24	10	0	CB around T-S line	-1.72	1.00
G275D	DA	E005	Cadmium, total	mg/L	03/30/21 - 05/02/24	10	100	All ND - Last	0.001	0.001
G275D	DA	E005	Chloride, total	mg/L	03/30/21 - 05/02/24	10	0	CI around mean	19.9	67.0
G275D	DA	E005	Chromium, total	mg/L	03/30/21 - 05/02/24	10	80	CB around T-S line	-0.00373	0.0190
G275D	DA	E005	Cobalt, total	mg/L	03/30/21 - 05/02/24	10	60	CB around T-S line	-0.00365	0.00590
G275D	DA	E005	Fluoride, total	mg/L	03/30/21 - 05/02/24	10	0	CI around mean	0.402	0.564
G275D	DA	E005	Lead, total	mg/L	03/30/21 - 05/02/24	10	90	CI around median	0.001	0.0120
G275D	DA	E005	Lithium, total	mg/L	03/30/21 - 05/02/24	10	70	CB around T-S line	-0.000983	0.0190
G275D	DA	E005	Mercury, total	mg/L	03/30/21 - 05/02/24	10	90	CI around median	0.0002	0.0002
G275D	DA	E005	Molybdenum, total	mg/L	03/30/21 - 05/02/24	10	10	CB around linear reg	-0.00914	0.00450
G275D	DA	E005	pH (field)	SU	03/30/21 - 05/02/24	10	0	CI around mean	7.0/7.3	6.6/7.6
G275D	DA	E005	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 05/02/24	11	0	CI around mean	0.607	1.60
G275D	DA	E005	Selenium, total	mg/L	03/30/21 - 05/02/24	10	100	All ND - Last	0.001	0.00480
G275D	DA	E005	Sulfate, total	mg/L	03/30/21 - 05/02/24	10	0	CB around linear reg	50.6	94.0
G275D	DA	E005	Thallium, total	mg/L	03/30/21 - 05/02/24	10	100	All ND - Last	0.002	0.001
G275D	DA	E005	Total Dissolved Solids	mg/L	03/30/21 - 05/02/24	10	0	CI around median	840	551
G276	UA	E005	Antimony, total	mg/L	11/24/15 - 05/07/24	26	97	CB around T-S line	0.00243	0.003

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G276	UA	E005	Arsenic, total	mg/L	11/24/15 - 05/07/24	29	85	CI around median	0.001	0.00660
G276	UA	E005	Barium, total	mg/L	11/24/15 - 05/07/24	29	0	CB around T-S line	0.0325	0.110
G276	UA	E005	Beryllium, total	mg/L	11/24/15 - 05/07/24	26	94	Most recent sample	0.001	0.001
G276	UA	E005	Boron, total	mg/L	11/24/15 - 05/07/24	30	11	CI around geomean	0.0175	1.00
G276	UA	E005	Cadmium, total	mg/L	11/24/15 - 05/07/24	26	100	All ND - Last	0.001	0.001
G276	UA	E005	Chloride, total	mg/L	11/24/15 - 05/07/24	30	0	CI around median	22	67.0
G276	UA	E005	Chromium, total	mg/L	11/24/15 - 05/07/24	28	84	CI around median	0.004	0.0190
G276	UA	E005	Cobalt, total	mg/L	11/24/15 - 05/07/24	28	97	CB around T-S line	0.002	0.00590
G276	UA	E005	Fluoride, total	mg/L	11/24/15 - 05/07/24	30	5	CI around median	0.355	0.564
G276	UA	E005	Lead, total	mg/L	11/24/15 - 05/07/24	29	79	CI around median	0.001	0.0120
G276	UA	E005	Lithium, total	mg/L	11/24/15 - 05/07/24	24	42	CI around median	0.012	0.0190
G276	UA	E005	Mercury, total	mg/L	11/24/15 - 05/07/24	26	100	All ND - Last	0.0002	0.0002
G276	UA	E005	Molybdenum, total	mg/L	11/24/15 - 05/07/24	29	80	CI around median	0.001	0.00450
G276	UA	E005	pH (field)	SU	11/24/15 - 05/07/24	31	0	CB around linear reg	6.7/7.0	6.6/7.6
G276	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 05/07/24	24	0	CI around geomean	0.383	1.60
G276	UA	E005	Selenium, total	mg/L	11/24/15 - 05/07/24	29	38	CB around linear reg	0.000718	0.00480
G276	UA	E005	Sulfate, total	mg/L	11/24/15 - 05/07/24	30	0	CB around T-S line	253	94.0
G276	UA	E005	Thallium, total	mg/L	11/24/15 - 05/07/24	27	100	All ND - Last	0.002	0.001
G276	UA	E005	Total Dissolved Solids	mg/L	11/24/15 - 05/07/24	30	0	CB around T-S line	856	551
G277	UA	E005	Antimony, total	mg/L	10/14/20 - 05/07/24	12	100	All ND - Last	0.001	0.003
G277	UA	E005	Arsenic, total	mg/L	10/14/20 - 05/07/24	12	60	CI around median	0.001	0.00660
G277	UA	E005	Barium, total	mg/L	10/14/20 - 05/07/24	12	0	CB around linear reg	0.0239	0.110
G277	UA	E005	Beryllium, total	mg/L	10/14/20 - 05/07/24	12	90	Most recent sample	0.001	0.001
G277	UA	E005	Boron, total	mg/L	10/14/20 - 05/07/24	12	13	CI around mean	0.06	1.00
G277	UA	E005	Cadmium, total	mg/L	10/14/20 - 05/07/24	12	100	All ND - Last	0.001	0.001
G277	UA	E005	Chloride, total	mg/L	10/14/20 - 05/07/24	12	0	CI around mean	67.9	67.0
G277	UA	E005	Chromium, total	mg/L	10/14/20 - 05/07/24	12	58	CI around median	0.0017	0.0190

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G277	UA	E005	Cobalt, total	mg/L	10/14/20 - 05/07/24	12	79	CI around median	0.001	0.00590
G277	UA	E005	Fluoride, total	mg/L	10/14/20 - 05/07/24	12	10	CI around median	0.125	0.564
G277	UA	E005	Lead, total	mg/L	10/14/20 - 05/07/24	12	57	CI around median	0.001	0.0120
G277	UA	E005	Lithium, total	mg/L	06/01/23 - 05/07/24	3	33	Most recent sample	0.01	0.0190
G277	UA	E005	Mercury, total	mg/L	10/14/20 - 05/07/24	12	95	Most recent sample	0.0002	0.0002
G277	UA	E005	Molybdenum, total	mg/L	10/14/20 - 05/07/24	12	100	All ND - Last	0.0015	0.00450
G277	UA	E005	pH (field)	SU	10/14/20 - 05/07/24	12	0	CI around mean	6.7/7.0	6.6/7.6
G277	UA	E005	Radium 226 + Radium 228, total	pCi/L	06/01/23 - 05/07/24	3	0	Most recent sample	0.0358	1.60
G277	UA	E005	Selenium, total	mg/L	10/14/20 - 05/07/24	12	58	CI around median	0.001	0.00480
G277	UA	E005	Sulfate, total	mg/L	10/14/20 - 05/07/24	12	0	CI around mean	307	94.0
G277	UA	E005	Thallium, total	mg/L	10/14/20 - 05/07/24	12	100	All ND - Last	0.002	0.001
G277	UA	E005	Total Dissolved Solids	mg/L	10/14/20 - 05/07/24	12	0	CI around mean	975	551
G279	UA	E005	Antimony, total	mg/L	11/24/15 - 05/03/24	26	100	All ND - Last	0.001	0.003
G279	UA	E005	Arsenic, total	mg/L	11/24/15 - 05/03/24	29	80	CI around median	0.001	0.00660
G279	UA	E005	Barium, total	mg/L	11/24/15 - 05/03/24	29	0	CB around T-S line	0.0313	0.110
G279	UA	E005	Beryllium, total	mg/L	11/24/15 - 05/03/24	26	100	All ND - Last	0.001	0.001
G279	UA	E005	Boron, total	mg/L	11/24/15 - 05/03/24	30	20	CB around T-S line	0.234	1.00
G279	UA	E005	Cadmium, total	mg/L	11/24/15 - 05/03/24	26	100	All ND - Last	0.001	0.001
G279	UA	E005	Chloride, total	mg/L	11/24/15 - 05/03/24	30	0	CB around linear reg	193	67.0
G279	UA	E005	Chromium, total	mg/L	11/24/15 - 05/03/24	28	90	CB around T-S line	0.004	0.0190
G279	UA	E005	Cobalt, total	mg/L	11/24/15 - 05/03/24	28	88	CB around T-S line	0.002	0.00590
G279	UA	E005	Fluoride, total	mg/L	11/24/15 - 05/03/24	30	7	CI around mean	0.344	0.564
G279	UA	E005	Lead, total	mg/L	11/24/15 - 05/03/24	29	84	CI around median	0.001	0.0120
G279	UA	E005	Lithium, total	mg/L	11/24/15 - 05/03/24	29	69	CB around T-S line	0.012	0.0190
G279	UA	E005	Mercury, total	mg/L	11/24/15 - 05/03/24	26	97	Most recent sample	0.0002	0.0002
G279	UA	E005	Molybdenum, total	mg/L	11/24/15 - 05/03/24	29	84	CI around median	0.001	0.00450
G279	UA	E005	pH (field)	SU	11/24/15 - 05/03/24	30	0	CB around linear reg	6.5/6.8	6.6/7.6

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G279	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 05/03/24	29	0	CI around mean	0.633	1.60
G279	UA	E005	Selenium, total	mg/L	11/24/15 - 05/03/24	29	22	CB around linear reg	-0.00394	0.00480
G279	UA	E005	Sulfate, total	mg/L	11/24/15 - 05/03/24	30	0	CI around geomean	414	94.0
G279	UA	E005	Thallium, total	mg/L	11/24/15 - 05/03/24	27	100	All ND - Last	0.002	0.001
G279	UA	E005	Total Dissolved Solids	mg/L	11/24/15 - 05/03/24	30	0	CB around linear reg	2,440	551
G283	LCU	E005	Antimony, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.001	0.003
G283	LCU	E005	Arsenic, total	mg/L	03/31/21 - 05/06/24	13	62	CI around median	0.001	0.00660
G283	LCU	E005	Barium, total	mg/L	03/31/21 - 05/06/24	13	0	CI around mean	0.16	0.110
G283	LCU	E005	Beryllium, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.001	0.001
G283	LCU	E005	Boron, total	mg/L	03/31/21 - 05/06/24	13	0	CI around mean	0.0384	1.00
G283	LCU	E005	Cadmium, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.001	0.001
G283	LCU	E005	Chloride, total	mg/L	03/31/21 - 05/06/24	13	0	CI around mean	37.9	67.0
G283	LCU	E005	Chromium, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.0015	0.0190
G283	LCU	E005	Cobalt, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.001	0.00590
G283	LCU	E005	Fluoride, total	mg/L	03/31/21 - 05/06/24	13	15	CI around mean	0.308	0.564
G283	LCU	E005	Lead, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.001	0.0120
G283	LCU	E005	Lithium, total	mg/L	03/31/21 - 05/06/24	13	69	CB around T-S line	0.00755	0.0190
G283	LCU	E005	Mercury, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.0002	0.0002
G283	LCU	E005	Molybdenum, total	mg/L	03/31/21 - 05/06/24	13	0	CI around geomean	0.00161	0.00450
G283	LCU	E005	pH (field)	SU	03/31/21 - 05/06/24	13	0	CI around mean	7.0/7.1	6.6/7.6
G283	LCU	E005	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 05/06/24	13	0	CI around geomean	0.595	1.60
G283	LCU	E005	Selenium, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.001	0.00480
G283	LCU	E005	Sulfate, total	mg/L	03/31/21 - 05/06/24	13	0	CI around mean	240	94.0
G283	LCU	E005	Thallium, total	mg/L	03/31/21 - 05/06/24	13	100	All ND - Last	0.002	0.001
G283	LCU	E005	Total Dissolved Solids	mg/L	03/31/21 - 05/06/24	13	0	CI around mean	792	551
G284	UA	E005	Antimony, total	mg/L	03/30/21 - 05/06/24	12	100	All ND - Last	0.001	0.003
G284	UA	E005	Arsenic, total	mg/L	03/30/21 - 05/06/24	12	92	Most recent sample	0.001	0.00660

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G284	UA	E005	Barium, total	mg/L	03/30/21 - 05/06/24	12	0	CI around median	0.0622	0.110
G284	UA	E005	Beryllium, total	mg/L	03/30/21 - 05/06/24	12	100	All ND - Last	0.001	0.001
G284	UA	E005	Boron, total	mg/L	03/30/21 - 05/06/24	12	0	CI around mean	0.0369	1.00
G284	UA	E005	Cadmium, total	mg/L	03/30/21 - 05/06/24	12	100	All ND - Last	0.001	0.001
G284	UA	E005	Chloride, total	mg/L	03/30/21 - 05/06/24	12	0	CI around mean	33.8	67.0
G284	UA	E005	Chromium, total	mg/L	03/30/21 - 05/06/24	12	100	All ND - Last	0.0015	0.0190
G284	UA	E005	Cobalt, total	mg/L	03/30/21 - 05/06/24	12	100	All ND - Last	0.001	0.00590
G284	UA	E005	Fluoride, total	mg/L	03/30/21 - 05/06/24	12	0	CI around mean	0.483	0.564
G284	UA	E005	Lead, total	mg/L	03/30/21 - 05/06/24	12	100	All ND - Last	0.001	0.0120
G284	UA	E005	Lithium, total	mg/L	03/30/21 - 05/06/24	12	75	CB around T-S line	0.00906	0.0190
G284	UA	E005	Mercury, total	mg/L	03/30/21 - 05/06/24	12	100	All ND - Last	0.0002	0.0002
G284	UA	E005	Molybdenum, total	mg/L	03/30/21 - 05/06/24	12	33	CI around median	0.001	0.00450
G284	UA	E005	pH (field)	SU	03/30/21 - 05/06/24	12	0	CI around mean	7.1/7.3	6.6/7.6
G284	UA	E005	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 05/06/24	12	0	CI around mean	0.16	1.60
G284	UA	E005	Selenium, total	mg/L	03/30/21 - 05/06/24	12	83	CI around median	0.001	0.00480
G284	UA	E005	Sulfate, total	mg/L	03/30/21 - 05/06/24	12	0	CI around median	63	94.0
G284	UA	E005	Thallium, total	mg/L	03/30/21 - 05/06/24	12	100	All ND - Last	0.002	0.001
G284	UA	E005	Total Dissolved Solids	mg/L	03/30/21 - 05/06/24	12	0	CI around mean	449	551
G285	LCU	E005	Antimony, total	mg/L	03/30/21 - 05/06/24	13	100	All ND - Last	0.001	0.003
G285	LCU	E005	Arsenic, total	mg/L	03/30/21 - 05/06/24	13	69	CI around median	0.001	0.00660
G285	LCU	E005	Barium, total	mg/L	03/30/21 - 05/06/24	13	0	CB around linear reg	0.0207	0.110
G285	LCU	E005	Beryllium, total	mg/L	03/30/21 - 05/06/24	13	100	All ND - Last	0.001	0.001
G285	LCU	E005	Boron, total	mg/L	03/30/21 - 05/06/24	13	0	CI around mean	0.108	1.00
G285	LCU	E005	Cadmium, total	mg/L	03/30/21 - 05/06/24	13	100	All ND - Last	0.001	0.001
G285	LCU	E005	Chloride, total	mg/L	03/30/21 - 05/06/24	13	0	CB around linear reg	4.51	67.0
G285	LCU	E005	Chromium, total	mg/L	03/30/21 - 05/06/24	13	92	CB around T-S line	0.00107	0.0190
G285	LCU	E005	Cobalt, total	mg/L	03/30/21 - 05/06/24	13	23	CI around mean	0.00177	0.00590

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G285	LCU	E005	Fluoride, total	mg/L	03/30/21 - 05/06/24	13	23	CI around mean	0.284	0.564
G285	LCU	E005	Lead, total	mg/L	03/30/21 - 05/06/24	13	100	All ND - Last	0.001	0.0120
G285	LCU	E005	Lithium, total	mg/L	03/30/21 - 05/06/24	13	69	CB around T-S line	0.0025	0.0190
G285	LCU	E005	Mercury, total	mg/L	03/30/21 - 05/06/24	13	92	CI around median	0.0002	0.0002
G285	LCU	E005	Molybdenum, total	mg/L	03/30/21 - 05/06/24	13	0	CB around linear reg	0.000711	0.00450
G285	LCU	E005	pH (field)	SU	03/30/21 - 05/06/24	13	0	CI around median	6.7/6.9	6.6/7.6
G285	LCU	E005	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 05/06/24	13	0	CI around geomean	1.23	1.60
G285	LCU	E005	Selenium, total	mg/L	03/30/21 - 05/06/24	13	100	All ND - Last	0.001	0.00480
G285	LCU	E005	Sulfate, total	mg/L	03/30/21 - 05/06/24	13	0	CB around linear reg	604	94.0
G285	LCU	E005	Thallium, total	mg/L	03/30/21 - 05/06/24	13	92	CB around T-S line	0.001	0.001
G285	LCU	E005	Total Dissolved Solids	mg/L	03/30/21 - 05/06/24	13	0	CI around mean	1,450	551

Notes:
Lower Confidence Limit (LCL) or Upper Confidence Limit (UCL) exceeded the statistical background value
HSU = hydrostratigraphic unit:
 DA = Deep Aquifer
 LCU = Lower Confining Unit
 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
845 QUARTERLY REPORT
COFFEEN POWER PLANT
GMF RECYCLE POND
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G271	UA	E006	Antimony, total	mg/L	11/23/15 - 07/31/24	27	92	CB around T-S line	0.00243	0.003
G271	UA	E006	Arsenic, total	mg/L	11/23/15 - 07/31/24	29	78	CI around median	0.001	0.00660
G271	UA	E006	Barium, total	mg/L	11/23/15 - 07/31/24	30	0	CB around T-S line	0.0158	0.110
G271	UA	E006	Beryllium, total	mg/L	11/23/15 - 07/31/24	27	97	CI around median	0.001	0.001
G271	UA	E006	Boron, total	mg/L	11/23/15 - 07/31/24	31	0	CI around geomean	0.675	1.00
G271	UA	E006	Cadmium, total	mg/L	11/23/15 - 07/31/24	27	98	CI around median	0.001	0.001
G271	UA	E006	Chloride, total	mg/L	11/23/15 - 07/31/24	31	0	CB around linear reg	47.3	67.0
G271	UA	E006	Chromium, total	mg/L	11/23/15 - 07/31/24	29	78	CI around median	0.004	0.0190
G271	UA	E006	Cobalt, total	mg/L	11/23/15 - 07/31/24	29	88	CB around T-S line	0.00174	0.00590
G271	UA	E006	Fluoride, total	mg/L	11/23/15 - 07/31/24	31	7	CI around mean	0.341	0.564
G271	UA	E006	Lead, total	mg/L	11/23/15 - 07/31/24	30	62	CI around median	0.001	0.0120
G271	UA	E006	Lithium, total	mg/L	11/23/15 - 07/31/24	25	88	CI around median	0.01	0.0190
G271	UA	E006	Mercury, total	mg/L	11/23/15 - 07/31/24	27	100	All ND - Last	0.0002	0.0002
G271	UA	E006	Molybdenum, total	mg/L	11/23/15 - 07/31/24	30	72	CI around median	0.001	0.00450
G271	UA	E006	pH (field)	SU	11/23/15 - 07/31/24	33	0	CI around mean	7.1/7.3	6.6/7.6
G271	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/23/15 - 07/31/24	25	0	CI around geomean	0.379	1.60
G271	UA	E006	Selenium, total	mg/L	11/23/15 - 07/31/24	29	7	CI around mean	0.0015	0.00480
G271	UA	E006	Sulfate, total	mg/L	11/23/15 - 07/31/24	31	0	CB around T-S line	173	94.0
G271	UA	E006	Thallium, total	mg/L	11/23/15 - 07/31/24	28	98	CB around T-S line	0.001	0.001
G271	UA	E006	Total Dissolved Solids	mg/L	11/23/15 - 07/31/24	31	0	CB around linear reg	616	551
G273	UA	E006	Antimony, total	mg/L	11/24/15 - 07/31/24	27	95	CB around T-S line	0.00235	0.003
G273	UA	E006	Arsenic, total	mg/L	11/24/15 - 07/31/24	30	86	CI around median	0.001	0.00660
G273	UA	E006	Barium, total	mg/L	11/24/15 - 07/31/24	30	0	CI around median	0.029	0.110
G273	UA	E006	Beryllium, total	mg/L	11/24/15 - 07/31/24	27	100	All ND - Last	0.001	0.001
G273	UA	E006	Boron, total	mg/L	11/24/15 - 07/31/24	31	5	CB around T-S line	-0.0697	1.00
G273	UA	E006	Cadmium, total	mg/L	11/24/15 - 07/31/24	27	98	CI around median	0.001	0.001
G273	UA	E006	Chloride, total	mg/L	11/24/15 - 07/31/24	31	0	CB around T-S line	70.5	67.0

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G273	UA	E006	Chromium, total	mg/L	11/24/15 - 07/31/24	29	95	CB around T-S line	0.00393	0.0190
G273	UA	E006	Cobalt, total	mg/L	11/24/15 - 07/31/24	29	98	CB around T-S line	0.00176	0.00590
G273	UA	E006	Fluoride, total	mg/L	11/24/15 - 07/31/24	31	19	CI around mean	0.303	0.564
G273	UA	E006	Lead, total	mg/L	11/24/15 - 07/31/24	30	89	CI around median	0.001	0.0120
G273	UA	E006	Lithium, total	mg/L	11/24/15 - 07/31/24	25	72	CI around median	0.01	0.0190
G273	UA	E006	Mercury, total	mg/L	11/24/15 - 07/31/24	27	100	All ND - Last	0.0002	0.0002
G273	UA	E006	Molybdenum, total	mg/L	11/24/15 - 07/31/24	30	91	CB around T-S line	0.001	0.00450
G273	UA	E006	pH (field)	SU	11/24/15 - 07/31/24	33	0	CI around mean	7.0/7.1	6.6/7.6
G273	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 07/31/24	25	0	CI around mean	0.344	1.60
G273	UA	E006	Selenium, total	mg/L	11/24/15 - 07/31/24	30	95	CI around median	0.001	0.00480
G273	UA	E006	Sulfate, total	mg/L	11/24/15 - 07/31/24	31	0	CI around median	410	94.0
G273	UA	E006	Thallium, total	mg/L	11/24/15 - 07/31/24	28	95	CB around T-S line	0.001	0.001
G273	UA	E006	Total Dissolved Solids	mg/L	11/24/15 - 07/31/24	31	0	CB around linear reg	1,040	551
G275	UA	E006	Antimony, total	mg/L	10/14/20 - 08/01/24	12	95	CB around T-S line	0.00123	0.003
G275	UA	E006	Arsenic, total	mg/L	10/14/20 - 08/01/24	12	56	CI around median	0.001	0.00660
G275	UA	E006	Barium, total	mg/L	10/14/20 - 08/01/24	12	0	CI around geomean	0.0254	0.110
G275	UA	E006	Beryllium, total	mg/L	10/14/20 - 08/01/24	12	100	All ND - Last	0.001	0.001
G275	UA	E006	Boron, total	mg/L	10/14/20 - 08/01/24	12	0	CI around mean	1.62	1.00
G275	UA	E006	Cadmium, total	mg/L	10/14/20 - 08/01/24	12	100	All ND - Last	0.001	0.001
G275	UA	E006	Chloride, total	mg/L	10/14/20 - 08/01/24	12	0	CI around mean	16.1	67.0
G275	UA	E006	Chromium, total	mg/L	10/14/20 - 08/01/24	12	86	CI around median	0.0021	0.0190
G275	UA	E006	Cobalt, total	mg/L	10/14/20 - 08/01/24	12	95	CB around T-S line	0.000858	0.00590
G275	UA	E006	Fluoride, total	mg/L	10/14/20 - 08/01/24	12	14	CI around mean	0.268	0.564
G275	UA	E006	Lead, total	mg/L	10/14/20 - 08/01/24	12	59	CI around median	0.001	0.0120
G275	UA	E006	Lithium, total	mg/L	06/08/23 - 08/01/24	4	25	CI around mean	0.00698	0.0190
G275	UA	E006	Mercury, total	mg/L	10/14/20 - 08/01/24	12	100	All ND - Last	0.0002	0.0002
G275	UA	E006	Molybdenum, total	mg/L	10/14/20 - 08/01/24	12	92	CB around T-S line	0.001	0.00450

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G275	UA	E006	pH (field)	SU	10/14/20 - 08/01/24	12	0	CI around mean	6.9/7.1	6.6/7.6
G275	UA	E006	Radium 226 + Radium 228, total	pCi/L	06/08/23 - 08/01/24	4	0	CI around mean	-0.343	1.60
G275	UA	E006	Selenium, total	mg/L	10/14/20 - 08/01/24	12	81	CI around median	0.001	0.00480
G275	UA	E006	Sulfate, total	mg/L	10/14/20 - 08/01/24	12	0	CB around linear reg	200	94.0
G275	UA	E006	Thallium, total	mg/L	10/14/20 - 08/01/24	12	100	All ND - Last	0.002	0.001
G275	UA	E006	Total Dissolved Solids	mg/L	10/14/20 - 08/01/24	12	0	CI around mean	902	551
G275D	DA	E006	Antimony, total	mg/L	03/30/21 - 08/01/24	11	91	CB around T-S line	0.000259	0.003
G275D	DA	E006	Arsenic, total	mg/L	03/30/21 - 08/01/24	11	0	CB around linear reg	0.0156	0.00660
G275D	DA	E006	Barium, total	mg/L	03/30/21 - 08/01/24	11	0	CI around mean	0.348	0.110
G275D	DA	E006	Beryllium, total	mg/L	03/30/21 - 08/01/24	11	100	All ND - Last	0.001	0.001
G275D	DA	E006	Boron, total	mg/L	03/30/21 - 08/01/24	11	0	CB around T-S line	-1.59	1.00
G275D	DA	E006	Cadmium, total	mg/L	03/30/21 - 08/01/24	11	100	All ND - Last	0.001	0.001
G275D	DA	E006	Chloride, total	mg/L	03/30/21 - 08/01/24	11	0	CI around mean	19.9	67.0
G275D	DA	E006	Chromium, total	mg/L	03/30/21 - 08/01/24	11	82	CB around T-S line	-0.00318	0.0190
G275D	DA	E006	Cobalt, total	mg/L	03/30/21 - 08/01/24	11	64	CB around T-S line	-0.00177	0.00590
G275D	DA	E006	Fluoride, total	mg/L	03/30/21 - 08/01/24	11	9	CI around mean	0.368	0.564
G275D	DA	E006	Lead, total	mg/L	03/30/21 - 08/01/24	11	91	CI around median	0.001	0.0120
G275D	DA	E006	Lithium, total	mg/L	03/30/21 - 08/01/24	11	64	CB around T-S line	-0.00236	0.0190
G275D	DA	E006	Mercury, total	mg/L	03/30/21 - 08/01/24	11	91	CI around median	0.0002	0.0002
G275D	DA	E006	Molybdenum, total	mg/L	03/30/21 - 08/01/24	11	18	CB around linear reg	-0.00934	0.00450
G275D	DA	E006	pH (field)	SU	03/30/21 - 08/01/24	11	0	CI around mean	7.0/7.3	6.6/7.6
G275D	DA	E006	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/01/24	12	0	CI around mean	0.657	1.60
G275D	DA	E006	Selenium, total	mg/L	03/30/21 - 08/01/24	11	100	All ND - Last	0.001	0.00480
G275D	DA	E006	Sulfate, total	mg/L	03/30/21 - 08/01/24	11	0	CI around mean	128	94.0
G275D	DA	E006	Thallium, total	mg/L	03/30/21 - 08/01/24	11	100	All ND - Last	0.002	0.001
G275D	DA	E006	Total Dissolved Solids	mg/L	03/30/21 - 08/01/24	11	0	CI around median	840	551
G276	UA	E006	Antimony, total	mg/L	11/24/15 - 07/31/24	27	95	CB around T-S line	0.00229	0.003

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G276	UA	E006	Arsenic, total	mg/L	11/24/15 - 07/31/24	30	85	CI around median	0.001	0.00660
G276	UA	E006	Barium, total	mg/L	11/24/15 - 07/31/24	30	0	CB around T-S line	0.0317	0.110
G276	UA	E006	Beryllium, total	mg/L	11/24/15 - 07/31/24	27	95	Most recent sample	0.001	0.001
G276	UA	E006	Boron, total	mg/L	11/24/15 - 07/31/24	31	11	CI around geomean	0.0177	1.00
G276	UA	E006	Cadmium, total	mg/L	11/24/15 - 07/31/24	27	100	All ND - Last	0.001	0.001
G276	UA	E006	Chloride, total	mg/L	11/24/15 - 07/31/24	31	0	CI around median	23	67.0
G276	UA	E006	Chromium, total	mg/L	11/24/15 - 07/31/24	29	82	CI around median	0.004	0.0190
G276	UA	E006	Cobalt, total	mg/L	11/24/15 - 07/31/24	29	97	CB around T-S line	0.00178	0.00590
G276	UA	E006	Fluoride, total	mg/L	11/24/15 - 07/31/24	31	7	CI around median	0.355	0.564
G276	UA	E006	Lead, total	mg/L	11/24/15 - 07/31/24	30	79	CI around median	0.001	0.0120
G276	UA	E006	Lithium, total	mg/L	11/24/15 - 07/31/24	25	40	CI around median	0.0115	0.0190
G276	UA	E006	Mercury, total	mg/L	11/24/15 - 07/31/24	27	100	All ND - Last	0.0002	0.0002
G276	UA	E006	Molybdenum, total	mg/L	11/24/15 - 07/31/24	30	77	CI around median	0.001	0.00450
G276	UA	E006	pH (field)	SU	11/24/15 - 07/31/24	32	0	CB around linear reg	6.7/7.0	6.6/7.6
G276	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 07/31/24	25	0	CI around geomean	0.392	1.60
G276	UA	E006	Selenium, total	mg/L	11/24/15 - 07/31/24	30	40	CB around linear reg	0.000703	0.00480
G276	UA	E006	Sulfate, total	mg/L	11/24/15 - 07/31/24	31	0	CB around T-S line	253	94.0
G276	UA	E006	Thallium, total	mg/L	11/24/15 - 07/31/24	28	100	All ND - Last	0.002	0.001
G276	UA	E006	Total Dissolved Solids	mg/L	11/24/15 - 07/31/24	31	0	CB around T-S line	849	551
G277	UA	E006	Antimony, total	mg/L	10/14/20 - 07/30/24	13	100	All ND - Last	0.001	0.003
G277	UA	E006	Arsenic, total	mg/L	10/14/20 - 07/30/24	13	58	CI around median	0.001	0.00660
G277	UA	E006	Barium, total	mg/L	10/14/20 - 07/30/24	13	0	CB around linear reg	0.0222	0.110
G277	UA	E006	Beryllium, total	mg/L	10/14/20 - 07/30/24	13	90	Most recent sample	0.001	0.001
G277	UA	E006	Boron, total	mg/L	10/14/20 - 07/30/24	13	13	CB around linear reg	0.0998	1.00
G277	UA	E006	Cadmium, total	mg/L	10/14/20 - 07/30/24	13	100	All ND - Last	0.001	0.001
G277	UA	E006	Chloride, total	mg/L	10/14/20 - 07/30/24	13	0	CB around linear reg	103	67.0
G277	UA	E006	Chromium, total	mg/L	10/14/20 - 07/30/24	13	55	CI around median	0.004	0.0190

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G277	UA	E006	Cobalt, total	mg/L	10/14/20 - 07/30/24	13	80	CB around T-S line	0.000867	0.00590
G277	UA	E006	Fluoride, total	mg/L	10/14/20 - 07/30/24	13	15	CI around median	0.25	0.564
G277	UA	E006	Lead, total	mg/L	10/14/20 - 07/30/24	13	55	CI around median	0.001	0.0120
G277	UA	E006	Lithium, total	mg/L	06/01/23 - 07/30/24	4	25	CI around mean	0.00635	0.0190
G277	UA	E006	Mercury, total	mg/L	10/14/20 - 07/30/24	13	95	Most recent sample	0.0002	0.0002
G277	UA	E006	Molybdenum, total	mg/L	10/14/20 - 07/30/24	13	100	All ND - Last	0.0015	0.00450
G277	UA	E006	pH (field)	SU	10/14/20 - 07/30/24	13	0	CI around mean	6.7/7.0	6.6/7.6
G277	UA	E006	Radium 226 + Radium 228, total	pCi/L	06/01/23 - 07/30/24	4	0	CI around mean	-0.601	1.60
G277	UA	E006	Selenium, total	mg/L	10/14/20 - 07/30/24	13	60	CI around median	0.001	0.00480
G277	UA	E006	Sulfate, total	mg/L	10/14/20 - 07/30/24	13	0	CB around linear reg	482	94.0
G277	UA	E006	Thallium, total	mg/L	10/14/20 - 07/30/24	13	100	All ND - Last	0.002	0.001
G277	UA	E006	Total Dissolved Solids	mg/L	10/14/20 - 07/30/24	13	0	CB around linear reg	1,300	551
G279	UA	E006	Antimony, total	mg/L	11/24/15 - 07/30/24	27	100	All ND - Last	0.001	0.003
G279	UA	E006	Arsenic, total	mg/L	11/24/15 - 07/30/24	30	80	CI around median	0.001	0.00660
G279	UA	E006	Barium, total	mg/L	11/24/15 - 07/30/24	30	0	CB around T-S line	0.0285	0.110
G279	UA	E006	Beryllium, total	mg/L	11/24/15 - 07/30/24	27	100	All ND - Last	0.001	0.001
G279	UA	E006	Boron, total	mg/L	11/24/15 - 07/30/24	31	19	CB around linear reg	1.59	1.00
G279	UA	E006	Cadmium, total	mg/L	11/24/15 - 07/30/24	27	100	All ND - Last	0.001	0.001
G279	UA	E006	Chloride, total	mg/L	11/24/15 - 07/30/24	31	0	CB around linear reg	230	67.0
G279	UA	E006	Chromium, total	mg/L	11/24/15 - 07/30/24	29	90	CB around T-S line	0.00318	0.0190
G279	UA	E006	Cobalt, total	mg/L	11/24/15 - 07/30/24	29	88	CB around T-S line	0.00182	0.00590
G279	UA	E006	Fluoride, total	mg/L	11/24/15 - 07/30/24	31	9	CI around mean	0.34	0.564
G279	UA	E006	Lead, total	mg/L	11/24/15 - 07/30/24	30	84	CI around median	0.001	0.0120
G279	UA	E006	Lithium, total	mg/L	11/24/15 - 07/30/24	30	67	CB around T-S line	0.012	0.0190
G279	UA	E006	Mercury, total	mg/L	11/24/15 - 07/30/24	27	97	Most recent sample	0.0002	0.0002
G279	UA	E006	Molybdenum, total	mg/L	11/24/15 - 07/30/24	30	84	CI around median	0.001	0.00450
G279	UA	E006	pH (field)	SU	11/24/15 - 07/30/24	31	0	CB around linear reg	6.5/6.8	6.6/7.6

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G279	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/24/15 - 07/30/24	30	0	CI around mean	0.612	1.60
G279	UA	E006	Selenium, total	mg/L	11/24/15 - 07/30/24	30	21	CB around linear reg	-0.00387	0.00480
G279	UA	E006	Sulfate, total	mg/L	11/24/15 - 07/30/24	31	0	CB around linear reg	1,190	94.0
G279	UA	E006	Thallium, total	mg/L	11/24/15 - 07/30/24	28	100	All ND - Last	0.002	0.001
G279	UA	E006	Total Dissolved Solids	mg/L	11/24/15 - 07/30/24	31	0	CB around linear reg	2,600	551
G283	LCU	E006	Antimony, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.001	0.003
G283	LCU	E006	Arsenic, total	mg/L	03/31/21 - 08/07/24	14	64	CI around median	0.001	0.00660
G283	LCU	E006	Barium, total	mg/L	03/31/21 - 08/07/24	14	0	CI around mean	0.16	0.110
G283	LCU	E006	Beryllium, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.001	0.001
G283	LCU	E006	Boron, total	mg/L	03/31/21 - 08/07/24	14	0	CI around mean	0.0396	1.00
G283	LCU	E006	Cadmium, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.001	0.001
G283	LCU	E006	Chloride, total	mg/L	03/31/21 - 08/07/24	14	0	CI around mean	38.1	67.0
G283	LCU	E006	Chromium, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.0015	0.0190
G283	LCU	E006	Cobalt, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.001	0.00590
G283	LCU	E006	Fluoride, total	mg/L	03/31/21 - 08/07/24	14	21	CI around mean	0.311	0.564
G283	LCU	E006	Lead, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.001	0.0120
G283	LCU	E006	Lithium, total	mg/L	03/31/21 - 08/07/24	14	64	CB around T-S line	0.00696	0.0190
G283	LCU	E006	Mercury, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.0002	0.0002
G283	LCU	E006	Molybdenum, total	mg/L	03/31/21 - 08/07/24	14	0	CI around geomean	0.00161	0.00450
G283	LCU	E006	pH (field)	SU	03/31/21 - 08/07/24	14	0	CI around mean	7.0/7.1	6.6/7.6
G283	LCU	E006	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 08/07/24	14	0	CI around geomean	0.634	1.60
G283	LCU	E006	Selenium, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.001	0.00480
G283	LCU	E006	Sulfate, total	mg/L	03/31/21 - 08/07/24	14	0	CI around mean	241	94.0
G283	LCU	E006	Thallium, total	mg/L	03/31/21 - 08/07/24	14	100	All ND - Last	0.002	0.001
G283	LCU	E006	Total Dissolved Solids	mg/L	03/31/21 - 08/07/24	14	0	CI around mean	798	551
G284	UA	E006	Antimony, total	mg/L	03/30/21 - 08/07/24	13	92	CB around T-S line	0.000397	0.003
G284	UA	E006	Arsenic, total	mg/L	03/30/21 - 08/07/24	13	92	Most recent sample	0.001	0.00660

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G284	UA	E006	Barium, total	mg/L	03/30/21 - 08/07/24	13	0	CI around median	0.063	0.110
G284	UA	E006	Beryllium, total	mg/L	03/30/21 - 08/07/24	13	100	All ND - Last	0.001	0.001
G284	UA	E006	Boron, total	mg/L	03/30/21 - 08/07/24	13	0	CI around mean	0.038	1.00
G284	UA	E006	Cadmium, total	mg/L	03/30/21 - 08/07/24	13	100	All ND - Last	0.001	0.001
G284	UA	E006	Chloride, total	mg/L	03/30/21 - 08/07/24	13	0	CI around mean	31.8	67.0
G284	UA	E006	Chromium, total	mg/L	03/30/21 - 08/07/24	13	100	All ND - Last	0.0015	0.0190
G284	UA	E006	Cobalt, total	mg/L	03/30/21 - 08/07/24	13	100	All ND - Last	0.001	0.00590
G284	UA	E006	Fluoride, total	mg/L	03/30/21 - 08/07/24	13	8	CI around mean	0.441	0.564
G284	UA	E006	Lead, total	mg/L	03/30/21 - 08/07/24	13	100	All ND - Last	0.001	0.0120
G284	UA	E006	Lithium, total	mg/L	03/30/21 - 08/07/24	13	69	CB around T-S line	0.00836	0.0190
G284	UA	E006	Mercury, total	mg/L	03/30/21 - 08/07/24	13	100	All ND - Last	0.0002	0.0002
G284	UA	E006	Molybdenum, total	mg/L	03/30/21 - 08/07/24	13	31	CI around median	0.001	0.00450
G284	UA	E006	pH (field)	SU	03/30/21 - 08/07/24	13	0	CI around mean	7.1/7.2	6.6/7.6
G284	UA	E006	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/07/24	13	0	CI around mean	0.205	1.60
G284	UA	E006	Selenium, total	mg/L	03/30/21 - 08/07/24	13	77	CI around median	0.001	0.00480
G284	UA	E006	Sulfate, total	mg/L	03/30/21 - 08/07/24	13	0	CI around median	65	94.0
G284	UA	E006	Thallium, total	mg/L	03/30/21 - 08/07/24	13	100	All ND - Last	0.002	0.001
G284	UA	E006	Total Dissolved Solids	mg/L	03/30/21 - 08/07/24	13	0	CI around mean	451	551
G285	LCU	E006	Antimony, total	mg/L	03/30/21 - 08/07/24	14	100	All ND - Last	0.001	0.003
G285	LCU	E006	Arsenic, total	mg/L	03/30/21 - 08/07/24	14	64	CI around median	0.001	0.00660
G285	LCU	E006	Barium, total	mg/L	03/30/21 - 08/07/24	14	0	CB around linear reg	0.0201	0.110
G285	LCU	E006	Beryllium, total	mg/L	03/30/21 - 08/07/24	14	100	All ND - Last	0.001	0.001
G285	LCU	E006	Boron, total	mg/L	03/30/21 - 08/07/24	14	0	CI around mean	0.108	1.00
G285	LCU	E006	Cadmium, total	mg/L	03/30/21 - 08/07/24	14	100	All ND - Last	0.001	0.001
G285	LCU	E006	Chloride, total	mg/L	03/30/21 - 08/07/24	14	0	CB around linear reg	4.97	67.0
G285	LCU	E006	Chromium, total	mg/L	03/30/21 - 08/07/24	14	86	CB around T-S line	0.000778	0.0190
G285	LCU	E006	Cobalt, total	mg/L	03/30/21 - 08/07/24	14	21	CI around mean	0.00175	0.00590

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

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G285	LCU	E006	Fluoride, total	mg/L	03/30/21 - 08/07/24	14	29	CB around linear reg	0.321	0.564
G285	LCU	E006	Lead, total	mg/L	03/30/21 - 08/07/24	14	100	All ND - Last	0.001	0.0120
G285	LCU	E006	Lithium, total	mg/L	03/30/21 - 08/07/24	14	64	CB around T-S line	0.00135	0.0190
G285	LCU	E006	Mercury, total	mg/L	03/30/21 - 08/07/24	14	93	CI around median	0.0002	0.0002
G285	LCU	E006	Molybdenum, total	mg/L	03/30/21 - 08/07/24	14	0	CB around linear reg	0.000657	0.00450
G285	LCU	E006	pH (field)	SU	03/30/21 - 08/07/24	14	0	CB around T-S line	6.3/6.7	6.6/7.6
G285	LCU	E006	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/07/24	14	0	CI around geomean	1.27	1.60
G285	LCU	E006	Selenium, total	mg/L	03/30/21 - 08/07/24	14	100	All ND - Last	0.001	0.00480
G285	LCU	E006	Sulfate, total	mg/L	03/30/21 - 08/07/24	14	0	CB around linear reg	628	94.0
G285	LCU	E006	Thallium, total	mg/L	03/30/21 - 08/07/24	14	93	CB around T-S line	0.001	0.001
G285	LCU	E006	Total Dissolved Solids	mg/L	03/30/21 - 08/07/24	14	0	CI around mean	1,460	551

Notes:
Lower Confidence Limit (LCL) or Upper Confidence Limit (UCL) exceeded the statistical background value
HSU = hydrostratigraphic unit:
 DA = Deep Aquifer
 LCU = Lower Confining Unit
 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