



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 Ash Pond No. 2 (IEPA ID: W1350150004-02) 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 Coffeen Ash Pond No. 2 (IEPA ID: W1350150004-02), 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
Ash Pond No. 2; IEPA ID: **W1350150004-02**

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: *Dawnie Tichner* Director, Decommissioning and Demolition
Name 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	Ash Pond No. 2

INSPECTION REPORT 35 IAC § 845.540

(b)(1)(D) The annual hazard potential classification certification, if applicable (see Section 845.440).	Based on a review of the CCR unit's annual hazard potential classification, the unit is classified as a Class II CCR surface impoundment.
(b)(2)(A) Any changes in geometry of the structure since the previous annual inspection.	Closure of this impoundment was completed 2020
(b)(2)(B) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection.	See the attached.
(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	Impoundment has been capped and closed - there is zero (0) ac-ft of storage capacity.
(b)(2)(E) The approximate volume of the impounded water and CCR contained in the unit at the time of the inspection.	Impoundment has been dewatered, capped and closed, there is approximately 1300 ac-ft of CCR impounded.
(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: Ash Pond No. 2

35 IAC § 845.540 (b)(2)(B)			35 IAC § 845.540 (b)(2)(C)					
Instrument ID #	Type	Maximum recorded reading since previous annual inspection (ft)	Approximate Depth / Elevation					
			Since previous inspection:	Elevation (ft)			Depth (ft)	
				Minimum	Present	Maximum	Minimum	Present
P009	Piezometer	623.37'			0			0
P010	Piezometer	616.79'						
P012	Piezometer	621.39'						
P014	Piezometer	612.69'						
	CCR	636		648	42			54

Section 3

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

Prepared for
Illinois Power Generating Company

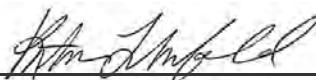
Date
January 31, 2025

Project No.
1940106781-004

**2024 35 I.A.C. § 845 ANNUAL
GROUNDWATER MONITORING AND
CORRECTIVE ACTION REPORT
ASH POND NO. 2
COFFEEN POWER PLANT
COFFEEN, ILLINOIS
IEPA ID NO. W1350150004-02**

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

Project name	Coffeen Power Plant Ash Pond No. 2	Ramboll
Project no.	1940106781-004	234 W. Florida Street
Recipient	Illinois Power Generating Company	Fifth Floor
Document type	Annual Groundwater Monitoring and Corrective Action Report	Milwaukee, WI 53204
Version	FINAL	USA
Date	January 31, 2025	T 414-837-3607
Prepared by	Kristen L. Theesfeld	F 414-837-3608
Checked by	Lauren D. Cook	https://ramboll.com
Approved by	Eric J. Tlachac, PE	
Description	Annual Report required by 35 I.A.C. § 845	



Kristen L. Theesfeld
Hydrogeologist



Eric J. Tlachac, PE
Senior Project Manager

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TABLES (IN TEXT)

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

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	Potentiometric Surface Map, January 12, 2024
Figure 5	Potentiometric Surface Map, February 12 and 13, 2024
Figure 6	Potentiometric Surface Map, March 29, 2024
Figure 7	Potentiometric Surface Map, April 29, 2024
Figure 8	Potentiometric Surface Map, May 29, 2024
Figure 9	Potentiometric Surface Map, June 29, 2024
Figure 10	Potentiometric Surface Map, July 29 and 30, 2024
Figure 11	Potentiometric Surface Map, August 28, 2024
Figure 12	Potentiometric Surface Map, September 28, 2024
Figure 13	Potentiometric Surface Map, October 28 and 29, 2024
Figure 14	Potentiometric Surface Map, November 19, 2024
Figure 15	Potentiometric Surface Map, December 11-13, 2024

ATTACHMENTS

- Attachment A Groundwater Elevation Data
- Attachment B 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
AP2	Ash Pond No. 2
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
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

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 Ash Pond Number (No.) 2 (AP2) located at Coffeen Power Plant (CPP) near Coffeen, Illinois. AP2 is recognized by coal combustion residuals (CCR) unit identification (ID) No. 102, Illinois Environmental Protection Agency (IEPA) ID No. W1350150004-02, and National Inventory of Dams (NID) No. IL50723.

As required by 35 I.A.C. § 845, an operating permit application for AP2 was submitted by Illinois Power Generating Company (IPGC) to the 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 the 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 AP2 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 AP2 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:

- Boron in G401, G402, G404, and G405
- Cobalt in G401
- pH in G401
- Sulfate in G401, G404, G405, G406, and G407
- Total Dissolved Solids (TDS) in G401, G402, G404, G405, and G407

Alternative Source Demonstrations (ASDs) were completed on December 15, 2023 for the cobalt GWPS exceedance at G401 and for the sulfate and TDS GWPS exceedances at G407 detected during the Quarter 2, 2023 sampling event (Geosyntec Consultants, Inc., 2023). The IEPA provided written responses on January 11, 2024 that it did not concur with the ASDs. These documents were included in the 2023 Annual Groundwater Monitoring and Corrective Action

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 AP2. 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.

Report (Ramboll, 2024d). As allowed by 35 I.A.C. § 845.650(e)(7), IPGC filed petitions with the Illinois Pollution Control Board (IPCB; case numbers 2024-055³ and 2024-056⁴) on February 20, 2024 for review of IEPA's non-concurrence and requested a partial stay of the requirements of 35 I.A.C. §§ 845.650(d), 845.660, 845.670, and 845.680 as they apply to the exceedances of the cobalt GWPS detected at G401 and the exceedances of the sulfate and TDS GWPSs detected at G407. These requests were unopposed by the IEPA and the IPCB granted them on April 18, 2024.

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

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. Upon selection of a remedy, a permit application will be submitted to IEPA identifying the proposed corrective action. 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 B**).

³ <https://pcb.illinois.gov/Cases/GetCaseDetailsById?caseId=17466>

⁴ <https://pcb.illinois.gov/Cases/GetCaseDetailsById?caseId=17467>

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 AP2 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 surface SI (**Figure 1**) and a visual delineation of any exceedances of the [groundwater protection standard] GWPS (**Figures 2 and 3**).
- B. Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken (**Section 3**, paragraph 1).
- C. A potentiometric surface map for each groundwater elevation sampling event required by 35 I.A.C. § 845.650(b)(2) (**Figures 4 through 15**).
- D. In addition to all the monitoring data obtained under 35 I.A.C. §§ 845.600-680, a summary including the number of groundwater samples that were collected for analysis for each background and [downgradient] compliance well, and the dates the samples were collected (**Section 3.1** and **Table A**).
- E. A narrative discussion of any statistically significant increases (SSIs) over background levels for the constituents listed in 35 I.A.C. § 845.600 (**Section 3.3** and **Attachment B**).
- F. Other information required to be included in the annual report as specified in 35 I.A.C. §§ 845.600-680.

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

- A. Specify whether groundwater monitoring data shows an SSI over background concentrations for one or more constituents listed in 35 I.A.C. § 845.600.
- B. Identify those constituents having an SSI over background concentrations and the names of the monitoring wells associated with the SSI(s).
- C. Specify whether there have been any exceedances of the GWPS for one or more constituents listed in 35 I.A.C. § 845.600.

- D. Identify those constituents with exceedances of the GWPS in 35 I.A.C. § 845.600 and the names of the monitoring wells associated with the exceedance.
- E. Provide the date when the assessment of corrective measures was initiated for the CCR SI.
- F. Provide the date when the assessment of corrective measures was completed for the CCR SI.
- G. Specify whether a remedy was selected under 35 I.A.C. § 845.670 during the current annual reporting period, and if so, the date of remedy selection.
- H. Specify whether remedial activities were initiated or are ongoing under 35 I.A.C. § 845.780 during the current annual reporting period.

This report provides the required information for the CPP AP2 for calendar year 2024.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

An operating permit application for AP2 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 the 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 AP2 commence in the second quarter of 2023. After AP2 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 closure construction permit application for AP2 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 AP2 in 2024. ASDs were completed on December 15, 2023 for the cobalt GWPS exceedance at G401 and for the sulfate and TDS GWPS exceedances at G407. The IEPA provided written responses on January 11, 2024 that it did not concur with the ASDs. These documents were included in the 2023 Annual Groundwater Monitoring and Corrective Action Report (Ramboll, 2024d). As allowed by 35 I.A.C. § 845.650(e)(7), IPGC filed petitions with the IPCB (case numbers 2024-055 and 2024-056) on February 20, 2024 for review of IEPA's non-concurrence and requested a partial stay of the requirements of 35 I.A.C. §§ 845.650(d), 845.660, 845.670, and 845.680 as they apply to the exceedances of the cobalt GWPS detected at G401 and the exceedances of the sulfate and TDS GWPSs detected at G407. These requests were unopposed by the IEPA and the IPCB granted them on April 18, 2024.

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

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. Upon selection of a remedy, a permit application will be submitted to IEPA identifying the proposed corrective action.

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 2024⁵. Potentiometric surfaces for January through December 2024 are included in **Figures 4 through 15**.

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

3.1 Sample and Analysis Summary

One groundwater sample was collected from each background and compliance well during each quarterly monitoring event in 2024. All samples were collected and analyzed in accordance with the Groundwater Monitoring Plan provided in the operating permit application (Ramboll, 2021). A summary of the samples collected from background and compliance monitoring wells in 2024 is included in **Table A** on the following page. **Table 1** is a summary of the field parameters and analytical results from the 2024 sampling events. Laboratory analytical reports and field data sheets are attached to the quarterly Groundwater Monitoring Data and Detected Exceedances Reports for Quarters 1 through 3 (Ramboll, 2024a; Ramboll, 2024b; Ramboll, 2024c); therefore, these reports are not attached to this annual report to avoid reproduction of lengthy data transmittals that have been previously provided in hardcopy. Analytical data received after December 31, 2024 will be reported in the Quarter 4, 2024 Groundwater Monitoring Data and Detected Exceedances Report.

⁵ Monitoring well G1003 has not had measurable amounts of water since its construction in 2021; therefore, groundwater elevation data were not recorded.

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.

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 15-21, 2024	April 8, 2024	June 7, 2024	NA
E005	April 29 - May 8, 2024	June 17, 2024	August 16, 2024	NA
E006	July 30 - August 7, 2024	September 13, 2024	November 12, 2024	NA
E007	October 29 – November 7, 2024	December 19, 2024	TBD ⁴	TBD

Notes:

ASD: Alternative Source Demonstration

CMA: Corrective Measures Assessment

NA: not applicable

TBD: to be determined after January 31, 2025

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

² The following background wells were sampled for each event: G270, G280, and G281

³ The following compliance wells were sampled for each event: G401, G402, G403, G404, G405, G406, G407, and G1001

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

3.2 Exceedances of GWPS

In accordance with 35 I.A.C. § 845.610(b)(3)(C), the constituent concentrations observed at compliance monitoring wells identified as Statistical Results in **Table 2** were compared with the GWPSs described in 35 I.A.C. § 845.600 to determine exceedances of the GWPS. The following exceedances of the GWPSs were determined and are shown on **Figures 2 and 3**⁶:

- Boron in G401, G402, G404, and G405
- Cobalt in G401
- pH in G401
- Sulfate in G401, G404, G405, G406, and G407
- TDS in G401, G402, G404, G405, and G407

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

3.3 Exceedances of Background

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

⁶ 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 AP2 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 AP2. After AP2 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.
- Upon selection of a remedy, a permit application will be submitted to IEPA identifying the proposed corrective action.

6. REFERENCES

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<https://www.luminant.com/documents/CCR/IL-CCR/Coffeen/2023/2023-Coffeen%20AP2%20Part%20845%20Annual%20Consolidated%20Rpt-Coffeen-Ash%20Pond%202-W1350150004%20%9002.pdf>

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TABLES

TABLE 1.**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024**

845 QUARTERLY REPORT

COFFEEN POWER PLANT

ASH POND NO. 2

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**

845 QUARTERLY REPORT

COFFEEN POWER PLANT

ASH POND NO. 2

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
G281	Background	E004	02/15/2024	Antimony, total	0.0004 U	mg/L
G281	Background	E004	02/15/2024	Arsenic, total	0.001 UJ	mg/L
G281	Background	E004	02/15/2024	Barium, total	0.0785	mg/L
G281	Background	E004	02/15/2024	Beryllium, total	0.0002 U	mg/L
G281	Background	E004	02/15/2024	Boron, total	0.02 UJ	mg/L
G281	Background	E004	02/15/2024	Cadmium, total	0.0002 U	mg/L
G281	Background	E004	02/15/2024	Calcium, total	151	mg/L
G281	Background	E004	02/15/2024	Chloride, total	75.0	mg/L
G281	Background	E004	02/15/2024	Chromium, total	0.00310 J+	mg/L
G281	Background	E004	02/15/2024	Cobalt, total	0.001 UJ	mg/L
G281	Background	E004	02/15/2024	Dissolved Oxygen	2.53	mg/L
G281	Background	E004	02/15/2024	Fluoride, total	0.270	mg/L
G281	Background	E004	02/15/2024	Lead, total	0.00120	mg/L
G281	Background	E004	02/15/2024	Lithium, total	0.00600	mg/L
G281	Background	E004	02/15/2024	Mercury, total	0.00008 U	mg/L
G281	Background	E004	02/15/2024	Molybdenum, total	0.0006 U	mg/L
G281	Background	E004	02/15/2024	Oxidation Reduction Potential	156	mV
G281	Background	E004	02/15/2024	pH (field)	6.9	SU
G281	Background	E004	02/15/2024	Radium 226 + Radium 228, total	2.04	pCi/L
G281	Background	E004	02/15/2024	Selenium, total	0.0006 U	mg/L
G281	Background	E004	02/15/2024	Specific Conductance @ 25C (field)	1,370	micromhos/cm
G281	Background	E004	02/15/2024	Sulfate, total	289	mg/L
G281	Background	E004	02/15/2024	Temperature	12.8	degrees C
G281	Background	E004	02/15/2024	Thallium, total	0.001 U	mg/L
G281	Background	E004	02/15/2024	Total Dissolved Solids	850	mg/L
G281	Background	E004	02/15/2024	Turbidity, field	31.0	NTU
G1001	Compliance	E004	02/15/2024	Antimony, total	0.0004 U	mg/L
G1001	Compliance	E004	02/15/2024	Arsenic, total	0.0004 U	mg/L
G1001	Compliance	E004	02/15/2024	Barium, total	0.0593	mg/L
G1001	Compliance	E004	02/15/2024	Beryllium, total	0.0002 U	mg/L
G1001	Compliance	E004	02/15/2024	Boron, total	0.980	mg/L
G1001	Compliance	E004	02/15/2024	Cadmium, total	0.0002 U	mg/L
G1001	Compliance	E004	02/15/2024	Calcium, total	175	mg/L
G1001	Compliance	E004	02/15/2024	Chloride, total	20.0	mg/L
G1001	Compliance	E004	02/15/2024	Chromium, total	0.0015 UJ	mg/L
G1001	Compliance	E004	02/15/2024	Cobalt, total	0.001 UJ	mg/L
G1001	Compliance	E004	02/15/2024	Dissolved Oxygen	4.50	mg/L
G1001	Compliance	E004	02/15/2024	Fluoride, total	0.250	mg/L
G1001	Compliance	E004	02/15/2024	Lead, total	0.0006 U	mg/L
G1001	Compliance	E004	02/15/2024	Lithium, total	0.00910	mg/L

TABLE 1.**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024**

845 QUARTERLY REPORT

COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G1001	Compliance	E004	02/15/2024	Mercury, total	0.00008 U	mg/L
G1001	Compliance	E004	02/15/2024	Molybdenum, total	0.00280 J+	mg/L
G1001	Compliance	E004	02/15/2024	Oxidation Reduction Potential	158	mV
G1001	Compliance	E004	02/15/2024	pH (field)	7.0	SU
G1001	Compliance	E004	02/15/2024	Radium 226 + Radium 228, total	0.651	pCi/L
G1001	Compliance	E004	02/15/2024	Selenium, total	0.0006 U	mg/L
G1001	Compliance	E004	02/15/2024	Specific Conductance @ 25C (field)	1,310	micromhos/cm
G1001	Compliance	E004	02/15/2024	Sulfate, total	349	mg/L
G1001	Compliance	E004	02/15/2024	Temperature	10.1	degrees C
G1001	Compliance	E004	02/15/2024	Thallium, total	0.001 U	mg/L
G1001	Compliance	E004	02/15/2024	Total Dissolved Solids	1,090	mg/L
G1001	Compliance	E004	02/15/2024	Turbidity, field	5.60	NTU
G401	Compliance	E004	02/21/2024	Antimony, total	0.0004 U	mg/L
G401	Compliance	E004	02/21/2024	Arsenic, total	0.00110 J+	mg/L
G401	Compliance	E004	02/21/2024	Barium, total	0.00960 J+	mg/L
G401	Compliance	E004	02/21/2024	Beryllium, total	0.0002 U	mg/L
G401	Compliance	E004	02/21/2024	Boron, total	4.17	mg/L
G401	Compliance	E004	02/21/2024	Cadmium, total	0.001 UJ	mg/L
G401	Compliance	E004	02/21/2024	Calcium, total	535	mg/L
G401	Compliance	E004	02/21/2024	Chloride, total	4.00 J	mg/L
G401	Compliance	E004	02/21/2024	Chromium, total	0.0008 U	mg/L
G401	Compliance	E004	02/21/2024	Cobalt, total	0.159	mg/L
G401	Compliance	E004	02/21/2024	Dissolved Oxygen	1.38	mg/L
G401	Compliance	E004	02/21/2024	Fluoride, total	0.180	mg/L
G401	Compliance	E004	02/21/2024	Lead, total	0.0006 U	mg/L
G401	Compliance	E004	02/21/2024	Lithium, total	0.0249	mg/L
G401	Compliance	E004	02/21/2024	Mercury, total	0.00006 U	mg/L
G401	Compliance	E004	02/21/2024	Molybdenum, total	0.0006 U	mg/L
G401	Compliance	E004	02/21/2024	Oxidation Reduction Potential	177	mV
G401	Compliance	E004	02/21/2024	pH (field)	5.7	SU
G401	Compliance	E004	02/21/2024	Radium 226 + Radium 228, total	0.211	pCi/L
G401	Compliance	E004	02/21/2024	Selenium, total	0.0006 U	mg/L
G401	Compliance	E004	02/21/2024	Specific Conductance @ 25C (field)	2,990	micromhos/cm
G401	Compliance	E004	02/21/2024	Sulfate, total	2,130	mg/L
G401	Compliance	E004	02/21/2024	Temperature	15.8	degrees C
G401	Compliance	E004	02/21/2024	Thallium, total	0.001 U	mg/L
G401	Compliance	E004	02/21/2024	Total Dissolved Solids	2,890	mg/L
G401	Compliance	E004	02/21/2024	Turbidity, field	10.0	NTU
G402	Compliance	E004	02/21/2024	Antimony, total	0.0004 U	mg/L
G402	Compliance	E004	02/21/2024	Arsenic, total	0.00350 J+	mg/L
G402	Compliance	E004	02/21/2024	Barium, total	0.0285	mg/L
G402	Compliance	E004	02/21/2024	Beryllium, total	0.0002 U	mg/L
G402	Compliance	E004	02/21/2024	Boron, total	4.95	mg/L
G402	Compliance	E004	02/21/2024	Cadmium, total	0.0002 U	mg/L
G402	Compliance	E004	02/21/2024	Calcium, total	205	mg/L
G402	Compliance	E004	02/21/2024	Chloride, total	3 J	mg/L

TABLE 1.**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024**

845 QUARTERLY REPORT

COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G402	Compliance	E004	02/21/2024	Chromium, total	0.00340 J+	mg/L
G402	Compliance	E004	02/21/2024	Cobalt, total	0.00320 J+	mg/L
G402	Compliance	E004	02/21/2024	Dissolved Oxygen	4.12	mg/L
G402	Compliance	E004	02/21/2024	Fluoride, total	0.280	mg/L
G402	Compliance	E004	02/21/2024	Lead, total	0.00150 J+	mg/L
G402	Compliance	E004	02/21/2024	Lithium, total	0.0218	mg/L
G402	Compliance	E004	02/21/2024	Mercury, total	0.00006 U	mg/L
G402	Compliance	E004	02/21/2024	Molybdenum, total	0.00170 J+	mg/L
G402	Compliance	E004	02/21/2024	Oxidation Reduction Potential	147	mV
G402	Compliance	E004	02/21/2024	pH (field)	6.8	SU
G402	Compliance	E004	02/21/2024	Radium 226 + Radium 228, total	5.19	pCi/L
G402	Compliance	E004	02/21/2024	Selenium, total	0.0006 U	mg/L
G402	Compliance	E004	02/21/2024	Specific Conductance @ 25C (field)	1,710	micromhos/cm
G402	Compliance	E004	02/21/2024	Sulfate, total	607	mg/L
G402	Compliance	E004	02/21/2024	Temperature	13.9	degrees C
G402	Compliance	E004	02/21/2024	Thallium, total	0.001 U	mg/L
G402	Compliance	E004	02/21/2024	Total Dissolved Solids	1,260	mg/L
G402	Compliance	E004	02/21/2024	Turbidity, field	29.0	NTU
G403	Compliance	E004	02/21/2024	Antimony, total	0.0004 U	mg/L
G403	Compliance	E004	02/21/2024	Arsenic, total	0.001 UJ	mg/L
G403	Compliance	E004	02/21/2024	Barium, total	0.113	mg/L
G403	Compliance	E004	02/21/2024	Beryllium, total	0.0002 U	mg/L
G403	Compliance	E004	02/21/2024	Boron, total	0.0426 J+	mg/L
G403	Compliance	E004	02/21/2024	Cadmium, total	0.0002 U	mg/L
G403	Compliance	E004	02/21/2024	Calcium, total	79.2	mg/L
G403	Compliance	E004	02/21/2024	Chloride, total	7.00	mg/L
G403	Compliance	E004	02/21/2024	Chromium, total	0.0015 UJ	mg/L
G403	Compliance	E004	02/21/2024	Cobalt, total	0.001 UJ	mg/L
G403	Compliance	E004	02/21/2024	Dissolved Oxygen	2.57	mg/L
G403	Compliance	E004	02/21/2024	Fluoride, total	0.320	mg/L
G403	Compliance	E004	02/21/2024	Lead, total	0.0006 U	mg/L
G403	Compliance	E004	02/21/2024	Lithium, total	0.0024 J	mg/L
G403	Compliance	E004	02/21/2024	Mercury, total	0.00006 U	mg/L
G403	Compliance	E004	02/21/2024	Molybdenum, total	0.0015 UJ	mg/L
G403	Compliance	E004	02/21/2024	Oxidation Reduction Potential	146	mV
G403	Compliance	E004	02/21/2024	pH (field)	6.9	SU
G403	Compliance	E004	02/21/2024	Radium 226 + Radium 228, total	0.33	pCi/L
G403	Compliance	E004	02/21/2024	Selenium, total	0.0006 U	mg/L
G403	Compliance	E004	02/21/2024	Specific Conductance @ 25C (field)	738	micromhos/cm
G403	Compliance	E004	02/21/2024	Sulfate, total	83.0	mg/L
G403	Compliance	E004	02/21/2024	Temperature	13.3	degrees C
G403	Compliance	E004	02/21/2024	Thallium, total	0.001 U	mg/L
G403	Compliance	E004	02/21/2024	Total Dissolved Solids	380	mg/L
G403	Compliance	E004	02/21/2024	Turbidity, field	7.50	NTU
G404	Compliance	E004	02/21/2024	Antimony, total	0.0004 U	mg/L
G404	Compliance	E004	02/21/2024	Arsenic, total	0.001 UJ	mg/L

TABLE 1.**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024**

845 QUARTERLY REPORT

COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G404	Compliance	E004	02/21/2024	Barium, total	0.0480	mg/L
G404	Compliance	E004	02/21/2024	Beryllium, total	0.0002 U	mg/L
G404	Compliance	E004	02/21/2024	Boron, total	3.65	mg/L
G404	Compliance	E004	02/21/2024	Cadmium, total	0.0002 U	mg/L
G404	Compliance	E004	02/21/2024	Calcium, total	121	mg/L
G404	Compliance	E004	02/21/2024	Chloride, total	72.0	mg/L
G404	Compliance	E004	02/21/2024	Chromium, total	0.0015 UJ	mg/L
G404	Compliance	E004	02/21/2024	Cobalt, total	0.001 UJ	mg/L
G404	Compliance	E004	02/21/2024	Dissolved Oxygen	3.13	mg/L
G404	Compliance	E004	02/21/2024	Fluoride, total	0.200	mg/L
G404	Compliance	E004	02/21/2024	Lead, total	0.0006 U	mg/L
G404	Compliance	E004	02/21/2024	Lithium, total	0.00320	mg/L
G404	Compliance	E004	02/21/2024	Mercury, total	0.00006 U	mg/L
G404	Compliance	E004	02/21/2024	Molybdenum, total	0.0015 UJ	mg/L
G404	Compliance	E004	02/21/2024	Oxidation Reduction Potential	151	mV
G404	Compliance	E004	02/21/2024	pH (field)	6.8	SU
G404	Compliance	E004	02/21/2024	Radium 226 + Radium 228, total	0.0931	pCi/L
G404	Compliance	E004	02/21/2024	Selenium, total	0.0006 U	mg/L
G404	Compliance	E004	02/21/2024	Specific Conductance @ 25C (field)	1,260	micromhos/cm
G404	Compliance	E004	02/21/2024	Sulfate, total	287	mg/L
G404	Compliance	E004	02/21/2024	Temperature	11.2	degrees C
G404	Compliance	E004	02/21/2024	Thallium, total	0.001 U	mg/L
G404	Compliance	E004	02/21/2024	Total Dissolved Solids	812	mg/L
G404	Compliance	E004	02/21/2024	Turbidity, field	5.10	NTU
G405	Compliance	E004	02/21/2024	Antimony, total	0.00100 J+	mg/L
G405	Compliance	E004	02/21/2024	Arsenic, total	0.00110 J+	mg/L
G405	Compliance	E004	02/21/2024	Barium, total	0.0181	mg/L
G405	Compliance	E004	02/21/2024	Beryllium, total	0.0002 U	mg/L
G405	Compliance	E004	02/21/2024	Boron, total	8.69	mg/L
G405	Compliance	E004	02/21/2024	Cadmium, total	0.0002 U	mg/L
G405	Compliance	E004	02/21/2024	Calcium, total	232	mg/L
G405	Compliance	E004	02/21/2024	Chloride, total	18.0	mg/L
G405	Compliance	E004	02/21/2024	Chromium, total	0.0015 UJ	mg/L
G405	Compliance	E004	02/21/2024	Cobalt, total	0.00120 J+	mg/L
G405	Compliance	E004	02/21/2024	Dissolved Oxygen	2.81	mg/L
G405	Compliance	E004	02/21/2024	Fluoride, total	0.370	mg/L
G405	Compliance	E004	02/21/2024	Lead, total	0.00100 J+	mg/L
G405	Compliance	E004	02/21/2024	Lithium, total	0.0025 J	mg/L
G405	Compliance	E004	02/21/2024	Mercury, total	0.00006 U	mg/L
G405	Compliance	E004	02/21/2024	Molybdenum, total	0.0015 UJ	mg/L
G405	Compliance	E004	02/21/2024	Oxidation Reduction Potential	153	mV
G405	Compliance	E004	02/21/2024	pH (field)	6.8	SU
G405	Compliance	E004	02/21/2024	Radium 226 + Radium 228, total	0.235	pCi/L
G405	Compliance	E004	02/21/2024	Selenium, total	0.0006 U	mg/L
G405	Compliance	E004	02/21/2024	Specific Conductance @ 25C (field)	2,030	micromhos/cm
G405	Compliance	E004	02/21/2024	Sulfate, total	1,000	mg/L

TABLE 1.**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024**

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COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G405	Compliance	E004	02/21/2024	Temperature	12.5	degrees C
G405	Compliance	E004	02/21/2024	Thallium, total	0.001 U	mg/L
G405	Compliance	E004	02/21/2024	Total Dissolved Solids	1,750	mg/L
G405	Compliance	E004	02/21/2024	Turbidity, field	8.90	NTU
G406	Compliance	E004	02/21/2024	Antimony, total	0.0004 U	mg/L
G406	Compliance	E004	02/21/2024	Arsenic, total	0.0004 U	mg/L
G406	Compliance	E004	02/21/2024	Barium, total	0.0124 J+	mg/L
G406	Compliance	E004	02/21/2024	Beryllium, total	0.0002 U	mg/L
G406	Compliance	E004	02/21/2024	Boron, total	1.66	mg/L
G406	Compliance	E004	02/21/2024	Cadmium, total	0.0002 U	mg/L
G406	Compliance	E004	02/21/2024	Calcium, total	192	mg/L
G406	Compliance	E004	02/21/2024	Chloride, total	4.00 J	mg/L
G406	Compliance	E004	02/21/2024	Chromium, total	0.0008 U	mg/L
G406	Compliance	E004	02/21/2024	Cobalt, total	0.001 UJ	mg/L
G406	Compliance	E004	02/21/2024	Dissolved Oxygen	2.87	mg/L
G406	Compliance	E004	02/21/2024	Fluoride, total	0.330	mg/L
G406	Compliance	E004	02/21/2024	Lead, total	0.0006 U	mg/L
G406	Compliance	E004	02/21/2024	Lithium, total	0.00750	mg/L
G406	Compliance	E004	02/21/2024	Mercury, total	0.00006 U	mg/L
G406	Compliance	E004	02/21/2024	Molybdenum, total	0.0015 UJ	mg/L
G406	Compliance	E004	02/21/2024	Oxidation Reduction Potential	158	mV
G406	Compliance	E004	02/21/2024	pH (field)	6.6	SU
G406	Compliance	E004	02/21/2024	Radium 226 + Radium 228, total	0.487	pCi/L
G406	Compliance	E004	02/21/2024	Selenium, total	0.0006 U	mg/L
G406	Compliance	E004	02/21/2024	Specific Conductance @ 25C (field)	1,420	micromhos/cm
G406	Compliance	E004	02/21/2024	Sulfate, total	496	mg/L
G406	Compliance	E004	02/21/2024	Temperature	15.2	degrees C
G406	Compliance	E004	02/21/2024	Thallium, total	0.001 U	mg/L
G406	Compliance	E004	02/21/2024	Total Dissolved Solids	1,080	mg/L
G406	Compliance	E004	02/21/2024	Turbidity, field	1 U	NTU
G407	Compliance	E004	02/20/2024	Antimony, total	0.0004 U	mg/L
G407	Compliance	E004	02/20/2024	Arsenic, total	0.0004 U	mg/L
G407	Compliance	E004	02/20/2024	Barium, total	0.0118 J+	mg/L
G407	Compliance	E004	02/20/2024	Beryllium, total	0.0002 U	mg/L
G407	Compliance	E004	02/20/2024	Boron, total	0.0949 J+	mg/L
G407	Compliance	E004	02/20/2024	Cadmium, total	0.0002 U	mg/L
G407	Compliance	E004	02/20/2024	Calcium, total	285	mg/L
G407	Compliance	E004	02/20/2024	Chloride, total	12.0	mg/L
G407	Compliance	E004	02/20/2024	Chromium, total	0.00180 J+	mg/L
G407	Compliance	E004	02/20/2024	Cobalt, total	0.001 UJ	mg/L
G407	Compliance	E004	02/20/2024	Dissolved Oxygen	3.48	mg/L
G407	Compliance	E004	02/20/2024	Fluoride, total	0.280	mg/L
G407	Compliance	E004	02/20/2024	Lead, total	0.0006 U	mg/L
G407	Compliance	E004	02/20/2024	Lithium, total	0.0360	mg/L
G407	Compliance	E004	02/20/2024	Mercury, total	0.00006 U	mg/L
G407	Compliance	E004	02/20/2024	Molybdenum, total	0.0015 UJ	mg/L

TABLE 1.**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024**

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COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G407	Compliance	E004	02/20/2024	Oxidation Reduction Potential	141	mV
G407	Compliance	E004	02/20/2024	pH (field)	6.8	SU
G407	Compliance	E004	02/20/2024	Radium 226 + Radium 228, total	0.644	pCi/L
G407	Compliance	E004	02/20/2024	Selenium, total	0.0006 U	mg/L
G407	Compliance	E004	02/20/2024	Specific Conductance @ 25C (field)	1,850	micromhos/cm
G407	Compliance	E004	02/20/2024	Sulfate, total	1,130	mg/L
G407	Compliance	E004	02/20/2024	Temperature	13.0	degrees C
G407	Compliance	E004	02/20/2024	Thallium, total	0.001 U	mg/L
G407	Compliance	E004	02/20/2024	Total Dissolved Solids	1,900 J-	mg/L
G407	Compliance	E004	02/20/2024	Turbidity, field	6.80	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 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**

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COFFEEN POWER PLANT

ASH POND NO. 2

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**

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COFFEEN POWER PLANT

ASH POND NO. 2

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
G281	Background	E005	05/03/2024	Antimony, total	0.0006 U	mg/L
G281	Background	E005	05/03/2024	Arsenic, total	0.0006 J	mg/L
G281	Background	E005	05/03/2024	Barium, total	0.0703	mg/L
G281	Background	E005	05/03/2024	Beryllium, total	0.0002 U	mg/L
G281	Background	E005	05/03/2024	Boron, total	0.0092 U	mg/L
G281	Background	E005	05/03/2024	Cadmium, total	0.0002 U	mg/L
G281	Background	E005	05/03/2024	Calcium, total	151	mg/L
G281	Background	E005	05/03/2024	Chloride, total	78.0	mg/L
G281	Background	E005	05/03/2024	Chromium, total	0.00170 J+	mg/L
G281	Background	E005	05/03/2024	Cobalt, total	0.0004 J	mg/L
G281	Background	E005	05/03/2024	Dissolved Oxygen	0.150	mg/L
G281	Background	E005	05/03/2024	Fluoride, total	0.290	mg/L
G281	Background	E005	05/03/2024	Lead, total	0.0006 U	mg/L
G281	Background	E005	05/03/2024	Lithium, total	0.00480	mg/L
G281	Background	E005	05/03/2024	Mercury, total	0.00006 UJ	mg/L
G281	Background	E005	05/03/2024	Molybdenum, total	0.0009 J	mg/L
G281	Background	E005	05/03/2024	Oxidation Reduction Potential	91.0	mV
G281	Background	E005	05/03/2024	pH (field)	7.0	SU
G281	Background	E005	05/03/2024	Radium 226 + Radium 228, total	0.151	pCi/L
G281	Background	E005	05/03/2024	Selenium, total	0.0006 U	mg/L
G281	Background	E005	05/03/2024	Specific Conductance @ 25C (field)	1,330	micromhos/cm
G281	Background	E005	05/03/2024	Sulfate, total	292	mg/L
G281	Background	E005	05/03/2024	Temperature	13.7	degrees C
G281	Background	E005	05/03/2024	Thallium, total	0.001 U	mg/L
G281	Background	E005	05/03/2024	Total Dissolved Solids	890	mg/L
G281	Background	E005	05/03/2024	Turbidity, field	63.0	NTU
G1001	Compliance	E005	05/07/2024	Antimony, total	0.0009 J	mg/L
G1001	Compliance	E005	05/07/2024	Arsenic, total	0.0007 J	mg/L
G1001	Compliance	E005	05/07/2024	Barium, total	0.0473	mg/L
G1001	Compliance	E005	05/07/2024	Beryllium, total	0.0002 U	mg/L
G1001	Compliance	E005	05/07/2024	Boron, total	0.823	mg/L
G1001	Compliance	E005	05/07/2024	Cadmium, total	0.0002 U	mg/L
G1001	Compliance	E005	05/07/2024	Calcium, total	130	mg/L
G1001	Compliance	E005	05/07/2024	Chloride, total	10.0	mg/L
G1001	Compliance	E005	05/07/2024	Chromium, total	0.00240 J+	mg/L
G1001	Compliance	E005	05/07/2024	Cobalt, total	0.0002 J	mg/L
G1001	Compliance	E005	05/07/2024	Dissolved Oxygen	2.79	mg/L
G1001	Compliance	E005	05/07/2024	Fluoride, total	0.290	mg/L
G1001	Compliance	E005	05/07/2024	Lead, total	0.0006 U	mg/L
G1001	Compliance	E005	05/07/2024	Lithium, total	0.00780	mg/L

TABLE 1.**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024**

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COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G1001	Compliance	E005	05/07/2024	Mercury, total	0.00006 U	mg/L
G1001	Compliance	E005	05/07/2024	Molybdenum, total	0.00690	mg/L
G1001	Compliance	E005	05/07/2024	Oxidation Reduction Potential	3.00	mV
G1001	Compliance	E005	05/07/2024	pH (field)	6.8	SU
G1001	Compliance	E005	05/07/2024	Radium 226 + Radium 228, total	0.47	pCi/L
G1001	Compliance	E005	05/07/2024	Selenium, total	0.0006 U	mg/L
G1001	Compliance	E005	05/07/2024	Specific Conductance @ 25C (field)	1,050	micromhos/cm
G1001	Compliance	E005	05/07/2024	Sulfate, total	150	mg/L
G1001	Compliance	E005	05/07/2024	Temperature	17.7	degrees C
G1001	Compliance	E005	05/07/2024	Thallium, total	0.001 U	mg/L
G1001	Compliance	E005	05/07/2024	Total Dissolved Solids	774	mg/L
G1001	Compliance	E005	05/07/2024	Turbidity, field	2.90	NTU
G401	Compliance	E005	05/02/2024	Antimony, total	0.0006 U	mg/L
G401	Compliance	E005	05/02/2024	Arsenic, total	0.0004 U	mg/L
G401	Compliance	E005	05/02/2024	Barium, total	0.0134	mg/L
G401	Compliance	E005	05/02/2024	Beryllium, total	0.0002 U	mg/L
G401	Compliance	E005	05/02/2024	Boron, total	1.56	mg/L
G401	Compliance	E005	05/02/2024	Cadmium, total	0.0002 J	mg/L
G401	Compliance	E005	05/02/2024	Calcium, total	244	mg/L
G401	Compliance	E005	05/02/2024	Chloride, total	6.00	mg/L
G401	Compliance	E005	05/02/2024	Chromium, total	0.0015 UJ	mg/L
G401	Compliance	E005	05/02/2024	Cobalt, total	0.0469	mg/L
G401	Compliance	E005	05/02/2024	Dissolved Oxygen	1.11	mg/L
G401	Compliance	E005	05/02/2024	Fluoride, total	0.220	mg/L
G401	Compliance	E005	05/02/2024	Lead, total	0.0006 U	mg/L
G401	Compliance	E005	05/02/2024	Lithium, total	0.0172	mg/L
G401	Compliance	E005	05/02/2024	Mercury, total	0.00006 U	mg/L
G401	Compliance	E005	05/02/2024	Molybdenum, total	0.0006 U	mg/L
G401	Compliance	E005	05/02/2024	Oxidation Reduction Potential	72.0	mV
G401	Compliance	E005	05/02/2024	pH (field)	5.9	SU
G401	Compliance	E005	05/02/2024	Radium 226 + Radium 228, total	0.317	pCi/L
G401	Compliance	E005	05/02/2024	Selenium, total	0.0006 U	mg/L
G401	Compliance	E005	05/02/2024	Specific Conductance @ 25C (field)	1,400	micromhos/cm
G401	Compliance	E005	05/02/2024	Sulfate, total	877	mg/L
G401	Compliance	E005	05/02/2024	Temperature	17.8	degrees C
G401	Compliance	E005	05/02/2024	Thallium, total	0.001 U	mg/L
G401	Compliance	E005	05/02/2024	Total Dissolved Solids	1,270	mg/L
G401	Compliance	E005	05/02/2024	Turbidity, field	4.20	NTU
G402	Compliance	E005	05/06/2024	Antimony, total	0.0006 U	mg/L
G402	Compliance	E005	05/06/2024	Arsenic, total	0.00180	mg/L
G402	Compliance	E005	05/06/2024	Barium, total	0.0193	mg/L
G402	Compliance	E005	05/06/2024	Beryllium, total	0.0002 U	mg/L
G402	Compliance	E005	05/06/2024	Boron, total	5.20	mg/L
G402	Compliance	E005	05/06/2024	Cadmium, total	0.0002 U	mg/L
G402	Compliance	E005	05/06/2024	Calcium, total	208	mg/L
G402	Compliance	E005	05/06/2024	Chloride, total	3 J	mg/L

TABLE 1.**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024**

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COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G402	Compliance	E005	05/06/2024	Chromium, total	0.00220 J+	mg/L
G402	Compliance	E005	05/06/2024	Cobalt, total	0.00110	mg/L
G402	Compliance	E005	05/06/2024	Dissolved Oxygen	7.65	mg/L
G402	Compliance	E005	05/06/2024	Fluoride, total	0.310	mg/L
G402	Compliance	E005	05/06/2024	Lead, total	0.0007 J	mg/L
G402	Compliance	E005	05/06/2024	Lithium, total	0.0224	mg/L
G402	Compliance	E005	05/06/2024	Mercury, total	0.00006 U	mg/L
G402	Compliance	E005	05/06/2024	Molybdenum, total	0.00220	mg/L
G402	Compliance	E005	05/06/2024	Oxidation Reduction Potential	111	mV
G402	Compliance	E005	05/06/2024	pH (field)	7.0	SU
G402	Compliance	E005	05/06/2024	Radium 226 + Radium 228, total	0.42	pCi/L
G402	Compliance	E005	05/06/2024	Selenium, total	0.0006 U	mg/L
G402	Compliance	E005	05/06/2024	Specific Conductance @ 25C (field)	1,670	micromhos/cm
G402	Compliance	E005	05/06/2024	Sulfate, total	594	mg/L
G402	Compliance	E005	05/06/2024	Temperature	14.0	degrees C
G402	Compliance	E005	05/06/2024	Thallium, total	0.001 U	mg/L
G402	Compliance	E005	05/06/2024	Total Dissolved Solids	1,370	mg/L
G402	Compliance	E005	05/06/2024	Turbidity, field	38.0	NTU
G403	Compliance	E005	05/06/2024	Antimony, total	0.0006 U	mg/L
G403	Compliance	E005	05/06/2024	Arsenic, total	0.0004 U	mg/L
G403	Compliance	E005	05/06/2024	Barium, total	0.107	mg/L
G403	Compliance	E005	05/06/2024	Beryllium, total	0.0002 U	mg/L
G403	Compliance	E005	05/06/2024	Boron, total	0.0092 U	mg/L
G403	Compliance	E005	05/06/2024	Cadmium, total	0.0002 U	mg/L
G403	Compliance	E005	05/06/2024	Calcium, total	83.2	mg/L
G403	Compliance	E005	05/06/2024	Chloride, total	7.00	mg/L
G403	Compliance	E005	05/06/2024	Chromium, total	0.0015 UJ	mg/L
G403	Compliance	E005	05/06/2024	Cobalt, total	0.0001 J	mg/L
G403	Compliance	E005	05/06/2024	Dissolved Oxygen	0.300	mg/L
G403	Compliance	E005	05/06/2024	Fluoride, total	0.300	mg/L
G403	Compliance	E005	05/06/2024	Lead, total	0.0006 U	mg/L
G403	Compliance	E005	05/06/2024	Lithium, total	0.00300	mg/L
G403	Compliance	E005	05/06/2024	Mercury, total	0.00006 U	mg/L
G403	Compliance	E005	05/06/2024	Molybdenum, total	0.0008 U	mg/L
G403	Compliance	E005	05/06/2024	Oxidation Reduction Potential	70.0	mV
G403	Compliance	E005	05/06/2024	pH (field)	6.8	SU
G403	Compliance	E005	05/06/2024	Radium 226 + Radium 228, total	0.562	pCi/L
G403	Compliance	E005	05/06/2024	Selenium, total	0.0006 U	mg/L
G403	Compliance	E005	05/06/2024	Specific Conductance @ 25C (field)	717	micromhos/cm
G403	Compliance	E005	05/06/2024	Sulfate, total	87.0	mg/L
G403	Compliance	E005	05/06/2024	Temperature	14.5	degrees C
G403	Compliance	E005	05/06/2024	Thallium, total	0.001 U	mg/L
G403	Compliance	E005	05/06/2024	Total Dissolved Solids	458	mg/L
G403	Compliance	E005	05/06/2024	Turbidity, field	6.20	NTU
G404	Compliance	E005	05/06/2024	Antimony, total	0.0006 U	mg/L
G404	Compliance	E005	05/06/2024	Arsenic, total	0.0004 U	mg/L

TABLE 1.**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024**

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COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G404	Compliance	E005	05/06/2024	Barium, total	0.0340	mg/L
G404	Compliance	E005	05/06/2024	Beryllium, total	0.0002 U	mg/L
G404	Compliance	E005	05/06/2024	Boron, total	4.62	mg/L
G404	Compliance	E005	05/06/2024	Cadmium, total	0.0002 U	mg/L
G404	Compliance	E005	05/06/2024	Calcium, total	131	mg/L
G404	Compliance	E005	05/06/2024	Chloride, total	63.0	mg/L
G404	Compliance	E005	05/06/2024	Chromium, total	0.0015 UJ	mg/L
G404	Compliance	E005	05/06/2024	Cobalt, total	0.0002 J	mg/L
G404	Compliance	E005	05/06/2024	Dissolved Oxygen	1.09	mg/L
G404	Compliance	E005	05/06/2024	Fluoride, total	0.180	mg/L
G404	Compliance	E005	05/06/2024	Lead, total	0.0006 U	mg/L
G404	Compliance	E005	05/06/2024	Lithium, total	0.00450	mg/L
G404	Compliance	E005	05/06/2024	Mercury, total	0.00006 U	mg/L
G404	Compliance	E005	05/06/2024	Molybdenum, total	0.0009 J	mg/L
G404	Compliance	E005	05/06/2024	Oxidation Reduction Potential	89.0	mV
G404	Compliance	E005	05/06/2024	pH (field)	6.8	SU
G404	Compliance	E005	05/06/2024	Radium 226 + Radium 228, total	0.405	pCi/L
G404	Compliance	E005	05/06/2024	Selenium, total	0.0006 U	mg/L
G404	Compliance	E005	05/06/2024	Specific Conductance @ 25C (field)	1,150	micromhos/cm
G404	Compliance	E005	05/06/2024	Sulfate, total	332	mg/L
G404	Compliance	E005	05/06/2024	Temperature	13.9	degrees C
G404	Compliance	E005	05/06/2024	Thallium, total	0.001 U	mg/L
G404	Compliance	E005	05/06/2024	Total Dissolved Solids	826	mg/L
G404	Compliance	E005	05/06/2024	Turbidity, field	3.00	NTU
G405	Compliance	E005	05/06/2024	Antimony, total	0.0006 U	mg/L
G405	Compliance	E005	05/06/2024	Arsenic, total	0.0006 J	mg/L
G405	Compliance	E005	05/06/2024	Barium, total	0.0116	mg/L
G405	Compliance	E005	05/06/2024	Beryllium, total	0.0002 U	mg/L
G405	Compliance	E005	05/06/2024	Boron, total	9.23	mg/L
G405	Compliance	E005	05/06/2024	Cadmium, total	0.0002 U	mg/L
G405	Compliance	E005	05/06/2024	Calcium, total	251	mg/L
G405	Compliance	E005	05/06/2024	Chloride, total	17.0	mg/L
G405	Compliance	E005	05/06/2024	Chromium, total	0.0015 UJ	mg/L
G405	Compliance	E005	05/06/2024	Cobalt, total	0.0008 J	mg/L
G405	Compliance	E005	05/06/2024	Dissolved Oxygen	0.710	mg/L
G405	Compliance	E005	05/06/2024	Fluoride, total	0.430	mg/L
G405	Compliance	E005	05/06/2024	Lead, total	0.0006 U	mg/L
G405	Compliance	E005	05/06/2024	Lithium, total	0.0026 J	mg/L
G405	Compliance	E005	05/06/2024	Mercury, total	0.00006 U	mg/L
G405	Compliance	E005	05/06/2024	Molybdenum, total	0.0008 U	mg/L
G405	Compliance	E005	05/06/2024	Oxidation Reduction Potential	59.0	mV
G405	Compliance	E005	05/06/2024	pH (field)	7.0	SU
G405	Compliance	E005	05/06/2024	Radium 226 + Radium 228, total	0.404	pCi/L
G405	Compliance	E005	05/06/2024	Selenium, total	0.0006 U	mg/L
G405	Compliance	E005	05/06/2024	Specific Conductance @ 25C (field)	1,820	micromhos/cm
G405	Compliance	E005	05/06/2024	Sulfate, total	886	mg/L

TABLE 1.**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024**

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COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G405	Compliance	E005	05/06/2024	Temperature	14.0	degrees C
G405	Compliance	E005	05/06/2024	Thallium, total	0.001 U	mg/L
G405	Compliance	E005	05/06/2024	Total Dissolved Solids	1,460	mg/L
G405	Compliance	E005	05/06/2024	Turbidity, field	8.10	NTU
G406	Compliance	E005	05/06/2024	Antimony, total	0.0006 U	mg/L
G406	Compliance	E005	05/06/2024	Arsenic, total	0.0004 U	mg/L
G406	Compliance	E005	05/06/2024	Barium, total	0.0128	mg/L
G406	Compliance	E005	05/06/2024	Beryllium, total	0.0002 U	mg/L
G406	Compliance	E005	05/06/2024	Boron, total	1.36	mg/L
G406	Compliance	E005	05/06/2024	Cadmium, total	0.0002 U	mg/L
G406	Compliance	E005	05/06/2024	Calcium, total	192	mg/L
G406	Compliance	E005	05/06/2024	Chloride, total	4.00	mg/L
G406	Compliance	E005	05/06/2024	Chromium, total	0.0015 UJ	mg/L
G406	Compliance	E005	05/06/2024	Cobalt, total	0.0005 J	mg/L
G406	Compliance	E005	05/06/2024	Dissolved Oxygen	0.360	mg/L
G406	Compliance	E005	05/06/2024	Fluoride, total	0.340	mg/L
G406	Compliance	E005	05/06/2024	Lead, total	0.0006 U	mg/L
G406	Compliance	E005	05/06/2024	Lithium, total	0.00940	mg/L
G406	Compliance	E005	05/06/2024	Mercury, total	0.00006 U	mg/L
G406	Compliance	E005	05/06/2024	Molybdenum, total	0.0008 U	mg/L
G406	Compliance	E005	05/06/2024	Oxidation Reduction Potential	100	mV
G406	Compliance	E005	05/06/2024	pH (field)	6.7	SU
G406	Compliance	E005	05/06/2024	Radium 226 + Radium 228, total	0.192	pCi/L
G406	Compliance	E005	05/06/2024	Selenium, total	0.0006 U	mg/L
G406	Compliance	E005	05/06/2024	Specific Conductance @ 25C (field)	1,370	micromhos/cm
G406	Compliance	E005	05/06/2024	Sulfate, total	474	mg/L
G406	Compliance	E005	05/06/2024	Temperature	14.9	degrees C
G406	Compliance	E005	05/06/2024	Thallium, total	0.001 U	mg/L
G406	Compliance	E005	05/06/2024	Total Dissolved Solids	1,030	mg/L
G406	Compliance	E005	05/06/2024	Turbidity, field	1.40	NTU
G407	Compliance	E005	04/29/2024	Antimony, total	0.0004 U	mg/L
G407	Compliance	E005	04/29/2024	Arsenic, total	0.0006 J	mg/L
G407	Compliance	E005	04/29/2024	Barium, total	0.0115	mg/L
G407	Compliance	E005	04/29/2024	Beryllium, total	0.0002 U	mg/L
G407	Compliance	E005	04/29/2024	Boron, total	0.0601	mg/L
G407	Compliance	E005	04/29/2024	Cadmium, total	0.0002 U	mg/L
G407	Compliance	E005	04/29/2024	Calcium, total	246	mg/L
G407	Compliance	E005	04/29/2024	Chloride, total	11.0	mg/L
G407	Compliance	E005	04/29/2024	Chromium, total	0.0015 UJ	mg/L
G407	Compliance	E005	04/29/2024	Cobalt, total	0.0005 J	mg/L
G407	Compliance	E005	04/29/2024	Dissolved Oxygen	1.48	mg/L
G407	Compliance	E005	04/29/2024	Fluoride, total	0.310	mg/L
G407	Compliance	E005	04/29/2024	Lead, total	0.0006 U	mg/L
G407	Compliance	E005	04/29/2024	Lithium, total	0.0421	mg/L
G407	Compliance	E005	04/29/2024	Mercury, total	0.00006 U	mg/L
G407	Compliance	E005	04/29/2024	Molybdenum, total	0.00210	mg/L

TABLE 1.**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024**

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COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G407	Compliance	E005	04/29/2024	Oxidation Reduction Potential	97.0	mV
G407	Compliance	E005	04/29/2024	pH (field)	6.7	SU
G407	Compliance	E005	04/29/2024	Radium 226 + Radium 228, total	0.42	pCi/L
G407	Compliance	E005	04/29/2024	Selenium, total	0.0006 U	mg/L
G407	Compliance	E005	04/29/2024	Specific Conductance @ 25C (field)	2,210	micromhos/cm
G407	Compliance	E005	04/29/2024	Sulfate, total	966	mg/L
G407	Compliance	E005	04/29/2024	Temperature	14.8	degrees C
G407	Compliance	E005	04/29/2024	Thallium, total	0.001 U	mg/L
G407	Compliance	E005	04/29/2024	Total Dissolved Solids	1,910	mg/L
G407	Compliance	E005	04/29/2024	Turbidity, field	71.0	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 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

ASH POND NO. 2

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**

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COFFEEN POWER PLANT

ASH POND NO. 2

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
G281	Background	E006	07/30/2024	Antimony, total	0.0004 U	mg/L
G281	Background	E006	07/30/2024	Arsenic, total	0.00120	mg/L
G281	Background	E006	07/30/2024	Barium, total	0.0848	mg/L
G281	Background	E006	07/30/2024	Beryllium, total	0.0002 U	mg/L
G281	Background	E006	07/30/2024	Boron, total	0.0092 U	mg/L
G281	Background	E006	07/30/2024	Cadmium, total	0.0002 U	mg/L
G281	Background	E006	07/30/2024	Calcium, total	163	mg/L
G281	Background	E006	07/30/2024	Chloride, total	76.0	mg/L
G281	Background	E006	07/30/2024	Chromium, total	0.00360	mg/L
G281	Background	E006	07/30/2024	Cobalt, total	0.0008 J	mg/L
G281	Background	E006	07/30/2024	Dissolved Oxygen	1.14	mg/L
G281	Background	E006	07/30/2024	Fluoride, total	0.28 J	mg/L
G281	Background	E006	07/30/2024	Lead, total	0.00110	mg/L
G281	Background	E006	07/30/2024	Lithium, total	0.00700	mg/L
G281	Background	E006	07/30/2024	Mercury, total	0.00006 U	mg/L
G281	Background	E006	07/30/2024	Molybdenum, total	0.001 J	mg/L
G281	Background	E006	07/30/2024	Oxidation Reduction Potential	76.0	mV
G281	Background	E006	07/30/2024	pH (field)	7.0	SU
G281	Background	E006	07/30/2024	Radium 226 + Radium 228, total	0.667	pCi/L
G281	Background	E006	07/30/2024	Selenium, total	0.0006 U	mg/L
G281	Background	E006	07/30/2024	Specific Conductance @ 25C (field)	1,350	micromhos/cm
G281	Background	E006	07/30/2024	Sulfate, total	314	mg/L
G281	Background	E006	07/30/2024	Temperature	19.4	degrees C
G281	Background	E006	07/30/2024	Thallium, total	0.0011 J	mg/L
G281	Background	E006	07/30/2024	Total Dissolved Solids	996	mg/L
G281	Background	E006	07/30/2024	Turbidity, field	38.0	NTU
G1001	Compliance	E006	08/02/2024	Antimony, total	0.00100 J	mg/L
G1001	Compliance	E006	08/02/2024	Arsenic, total	0.0008 J	mg/L
G1001	Compliance	E006	08/02/2024	Barium, total	0.0505	mg/L
G1001	Compliance	E006	08/02/2024	Beryllium, total	0.0002 U	mg/L
G1001	Compliance	E006	08/02/2024	Boron, total	1.24	mg/L
G1001	Compliance	E006	08/02/2024	Cadmium, total	0.0002 U	mg/L
G1001	Compliance	E006	08/02/2024	Calcium, total	123	mg/L
G1001	Compliance	E006	08/02/2024	Chloride, total	9.00	mg/L
G1001	Compliance	E006	08/02/2024	Chromium, total	0.0007 U	mg/L
G1001	Compliance	E006	08/02/2024	Cobalt, total	0.0005 J	mg/L
G1001	Compliance	E006	08/02/2024	Dissolved Oxygen	2.36	mg/L
G1001	Compliance	E006	08/02/2024	Fluoride, total	0.31 J	mg/L
G1001	Compliance	E006	08/02/2024	Lead, total	0.0006 U	mg/L
G1001	Compliance	E006	08/02/2024	Lithium, total	0.0134	mg/L

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

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COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G1001	Compliance	E006	08/02/2024	Mercury, total	0.00006 U	mg/L
G1001	Compliance	E006	08/02/2024	Molybdenum, total	0.00560	mg/L
G1001	Compliance	E006	08/02/2024	Oxidation Reduction Potential	-20.0	mV
G1001	Compliance	E006	08/02/2024	pH (field)	7.0	SU
G1001	Compliance	E006	08/02/2024	Radium 226 + Radium 228, total	1.27	pCi/L
G1001	Compliance	E006	08/02/2024	Selenium, total	0.0006 U	mg/L
G1001	Compliance	E006	08/02/2024	Specific Conductance @ 25C (field)	1,080	micromhos/cm
G1001	Compliance	E006	08/02/2024	Sulfate, total	146	mg/L
G1001	Compliance	E006	08/02/2024	Temperature	20.8	degrees C
G1001	Compliance	E006	08/02/2024	Thallium, total	0.001 U	mg/L
G1001	Compliance	E006	08/02/2024	Total Dissolved Solids	738	mg/L
G1001	Compliance	E006	08/02/2024	Turbidity, field	3.50	NTU
G401	Compliance	E006	08/02/2024	Antimony, total	0.0004 U	mg/L
G401	Compliance	E006	08/02/2024	Arsenic, total	0.00100	mg/L
G401	Compliance	E006	08/02/2024	Barium, total	0.0102	mg/L
G401	Compliance	E006	08/02/2024	Beryllium, total	0.0002 U	mg/L
G401	Compliance	E006	08/02/2024	Boron, total	5.58	mg/L
G401	Compliance	E006	08/02/2024	Cadmium, total	0.0004 J	mg/L
G401	Compliance	E006	08/02/2024	Calcium, total	533	mg/L
G401	Compliance	E006	08/02/2024	Chloride, total	3 J	mg/L
G401	Compliance	E006	08/02/2024	Chromium, total	0.0007 U	mg/L
G401	Compliance	E006	08/02/2024	Cobalt, total	0.174	mg/L
G401	Compliance	E006	08/02/2024	Dissolved Oxygen	0.840	mg/L
G401	Compliance	E006	08/02/2024	Fluoride, total	0.12 J	mg/L
G401	Compliance	E006	08/02/2024	Lead, total	0.0006 U	mg/L
G401	Compliance	E006	08/02/2024	Lithium, total	0.0425	mg/L
G401	Compliance	E006	08/02/2024	Mercury, total	0.00006 U	mg/L
G401	Compliance	E006	08/02/2024	Molybdenum, total	0.0006 U	mg/L
G401	Compliance	E006	08/02/2024	Oxidation Reduction Potential	19.0	mV
G401	Compliance	E006	08/02/2024	pH (field)	5.8	SU
G401	Compliance	E006	08/02/2024	Radium 226 + Radium 228, total	0.159	pCi/L
G401	Compliance	E006	08/02/2024	Selenium, total	0.0006 U	mg/L
G401	Compliance	E006	08/02/2024	Specific Conductance @ 25C (field)	2,830	micromhos/cm
G401	Compliance	E006	08/02/2024	Sulfate, total	1,970	mg/L
G401	Compliance	E006	08/02/2024	Temperature	17.5	degrees C
G401	Compliance	E006	08/02/2024	Thallium, total	0.001 U	mg/L
G401	Compliance	E006	08/02/2024	Total Dissolved Solids	2,030	mg/L
G401	Compliance	E006	08/02/2024	Turbidity, field	7.80	NTU
G402	Compliance	E006	08/01/2024	Antimony, total	0.0004 U	mg/L
G402	Compliance	E006	08/01/2024	Arsenic, total	0.00230	mg/L
G402	Compliance	E006	08/01/2024	Barium, total	0.0249	mg/L
G402	Compliance	E006	08/01/2024	Beryllium, total	0.0002 U	mg/L
G402	Compliance	E006	08/01/2024	Boron, total	5.73	mg/L
G402	Compliance	E006	08/01/2024	Cadmium, total	0.0002 J	mg/L
G402	Compliance	E006	08/01/2024	Calcium, total	229	mg/L
G402	Compliance	E006	08/01/2024	Chloride, total	2 J	mg/L

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

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COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G402	Compliance	E006	08/01/2024	Chromium, total	0.00270	mg/L
G402	Compliance	E006	08/01/2024	Cobalt, total	0.00200	mg/L
G402	Compliance	E006	08/01/2024	Dissolved Oxygen	7.00	mg/L
G402	Compliance	E006	08/01/2024	Fluoride, total	0.29 J	mg/L
G402	Compliance	E006	08/01/2024	Lead, total	0.00130	mg/L
G402	Compliance	E006	08/01/2024	Lithium, total	0.0230	mg/L
G402	Compliance	E006	08/01/2024	Mercury, total	0.00006 U	mg/L
G402	Compliance	E006	08/01/2024	Molybdenum, total	0.00170	mg/L
G402	Compliance	E006	08/01/2024	Oxidation Reduction Potential	76.0	mV
G402	Compliance	E006	08/01/2024	pH (field)	7.0	SU
G402	Compliance	E006	08/01/2024	Radium 226 + Radium 228, total	0.942	pCi/L
G402	Compliance	E006	08/01/2024	Selenium, total	0.0006 U	mg/L
G402	Compliance	E006	08/01/2024	Specific Conductance @ 25C (field)	1,630	micromhos/cm
G402	Compliance	E006	08/01/2024	Sulfate, total	588	mg/L
G402	Compliance	E006	08/01/2024	Temperature	17.9	degrees C
G402	Compliance	E006	08/01/2024	Thallium, total	0.001 U	mg/L
G402	Compliance	E006	08/01/2024	Total Dissolved Solids	1,350	mg/L
G402	Compliance	E006	08/01/2024	Turbidity, field	26.0	NTU
G403	Compliance	E006	08/01/2024	Antimony, total	0.0005 J	mg/L
G403	Compliance	E006	08/01/2024	Arsenic, total	0.0004 U	mg/L
G403	Compliance	E006	08/01/2024	Barium, total	0.129	mg/L
G403	Compliance	E006	08/01/2024	Beryllium, total	0.0002 U	mg/L
G403	Compliance	E006	08/01/2024	Boron, total	0.0255	mg/L
G403	Compliance	E006	08/01/2024	Cadmium, total	0.0002 U	mg/L
G403	Compliance	E006	08/01/2024	Calcium, total	91.2	mg/L
G403	Compliance	E006	08/01/2024	Chloride, total	6.00	mg/L
G403	Compliance	E006	08/01/2024	Chromium, total	0.0007 U	mg/L
G403	Compliance	E006	08/01/2024	Cobalt, total	0.0005 J	mg/L
G403	Compliance	E006	08/01/2024	Dissolved Oxygen	0.870	mg/L
G403	Compliance	E006	08/01/2024	Fluoride, total	0.27 J	mg/L
G403	Compliance	E006	08/01/2024	Lead, total	0.0006 U	mg/L
G403	Compliance	E006	08/01/2024	Lithium, total	0.00330	mg/L
G403	Compliance	E006	08/01/2024	Mercury, total	0.00006 U	mg/L
G403	Compliance	E006	08/01/2024	Molybdenum, total	0.0011 J	mg/L
G403	Compliance	E006	08/01/2024	Oxidation Reduction Potential	201	mV
G403	Compliance	E006	08/01/2024	pH (field)	6.8	SU
G403	Compliance	E006	08/01/2024	Radium 226 + Radium 228, total	0.537	pCi/L
G403	Compliance	E006	08/01/2024	Selenium, total	0.0006 U	mg/L
G403	Compliance	E006	08/01/2024	Specific Conductance @ 25C (field)	740	micromhos/cm
G403	Compliance	E006	08/01/2024	Sulfate, total	87.0	mg/L
G403	Compliance	E006	08/01/2024	Temperature	19.2	degrees C
G403	Compliance	E006	08/01/2024	Thallium, total	0.001 U	mg/L
G403	Compliance	E006	08/01/2024	Total Dissolved Solids	436	mg/L
G403	Compliance	E006	08/01/2024	Turbidity, field	16.0	NTU
G404	Compliance	E006	07/31/2024	Antimony, total	0.0004 U	mg/L
G404	Compliance	E006	07/31/2024	Arsenic, total	0.0004 J	mg/L

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

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COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G404	Compliance	E006	07/31/2024	Barium, total	0.0385	mg/L
G404	Compliance	E006	07/31/2024	Beryllium, total	0.0002 U	mg/L
G404	Compliance	E006	07/31/2024	Boron, total	5.03	mg/L
G404	Compliance	E006	07/31/2024	Cadmium, total	0.0002 U	mg/L
G404	Compliance	E006	07/31/2024	Calcium, total	160	mg/L
G404	Compliance	E006	07/31/2024	Chloride, total	64.0	mg/L
G404	Compliance	E006	07/31/2024	Chromium, total	0.0007 U	mg/L
G404	Compliance	E006	07/31/2024	Cobalt, total	0.0005 J	mg/L
G404	Compliance	E006	07/31/2024	Dissolved Oxygen	0.830	mg/L
G404	Compliance	E006	07/31/2024	Fluoride, total	0.19 J	mg/L
G404	Compliance	E006	07/31/2024	Lead, total	0.0006 U	mg/L
G404	Compliance	E006	07/31/2024	Lithium, total	0.00540	mg/L
G404	Compliance	E006	07/31/2024	Mercury, total	0.00006 U	mg/L
G404	Compliance	E006	07/31/2024	Molybdenum, total	0.00150	mg/L
G404	Compliance	E006	07/31/2024	Oxidation Reduction Potential	139	mV
G404	Compliance	E006	07/31/2024	pH (field)	6.7	SU
G404	Compliance	E006	07/31/2024	Radium 226 + Radium 228, total	0.462	pCi/L
G404	Compliance	E006	07/31/2024	Selenium, total	0.0006 U	mg/L
G404	Compliance	E006	07/31/2024	Specific Conductance @ 25C (field)	1,470	micromhos/cm
G404	Compliance	E006	07/31/2024	Sulfate, total	356	mg/L
G404	Compliance	E006	07/31/2024	Temperature	19.8	degrees C
G404	Compliance	E006	07/31/2024	Thallium, total	0.001 U	mg/L
G404	Compliance	E006	07/31/2024	Total Dissolved Solids	1,010	mg/L
G404	Compliance	E006	07/31/2024	Turbidity, field	4.10	NTU
G405	Compliance	E006	07/31/2024	Antimony, total	0.0008 J	mg/L
G405	Compliance	E006	07/31/2024	Arsenic, total	0.0006 J	mg/L
G405	Compliance	E006	07/31/2024	Barium, total	0.0140	mg/L
G405	Compliance	E006	07/31/2024	Beryllium, total	0.0002 U	mg/L
G405	Compliance	E006	07/31/2024	Boron, total	10.1	mg/L
G405	Compliance	E006	07/31/2024	Cadmium, total	0.0002 U	mg/L
G405	Compliance	E006	07/31/2024	Calcium, total	269	mg/L
G405	Compliance	E006	07/31/2024	Chloride, total	23.0	mg/L
G405	Compliance	E006	07/31/2024	Chromium, total	0.0007 U	mg/L
G405	Compliance	E006	07/31/2024	Cobalt, total	0.0007 J	mg/L
G405	Compliance	E006	07/31/2024	Dissolved Oxygen	0.730	mg/L
G405	Compliance	E006	07/31/2024	Fluoride, total	0.4 J	mg/L
G405	Compliance	E006	07/31/2024	Lead, total	0.0006 U	mg/L
G405	Compliance	E006	07/31/2024	Lithium, total	0.00320	mg/L
G405	Compliance	E006	07/31/2024	Mercury, total	0.00006 U	mg/L
G405	Compliance	E006	07/31/2024	Molybdenum, total	0.0007 J	mg/L
G405	Compliance	E006	07/31/2024	Oxidation Reduction Potential	80.0	mV
G405	Compliance	E006	07/31/2024	pH (field)	6.9	SU
G405	Compliance	E006	07/31/2024	Radium 226 + Radium 228, total	0.94	pCi/L
G405	Compliance	E006	07/31/2024	Selenium, total	0.0006 U	mg/L
G405	Compliance	E006	07/31/2024	Specific Conductance @ 25C (field)	1,960	micromhos/cm
G405	Compliance	E006	07/31/2024	Sulfate, total	965	mg/L

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

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COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G405	Compliance	E006	07/31/2024	Temperature	19.3	degrees C
G405	Compliance	E006	07/31/2024	Thallium, total	0.001 U	mg/L
G405	Compliance	E006	07/31/2024	Total Dissolved Solids	1,740	mg/L
G405	Compliance	E006	07/31/2024	Turbidity, field	19.0	NTU
G406	Compliance	E006	08/01/2024	Antimony, total	0.0009 J	mg/L
G406	Compliance	E006	08/01/2024	Arsenic, total	0.0006 J	mg/L
G406	Compliance	E006	08/01/2024	Barium, total	0.0199	mg/L
G406	Compliance	E006	08/01/2024	Beryllium, total	0.0002 U	mg/L
G406	Compliance	E006	08/01/2024	Boron, total	2.11	mg/L
G406	Compliance	E006	08/01/2024	Cadmium, total	0.0002 U	mg/L
G406	Compliance	E006	08/01/2024	Calcium, total	219	mg/L
G406	Compliance	E006	08/01/2024	Chloride, total	4.00 J	mg/L
G406	Compliance	E006	08/01/2024	Chromium, total	0.0007 U	mg/L
G406	Compliance	E006	08/01/2024	Cobalt, total	0.0006 J	mg/L
G406	Compliance	E006	08/01/2024	Dissolved Oxygen	0.870	mg/L
G406	Compliance	E006	08/01/2024	Fluoride, total	0.3 J	mg/L
G406	Compliance	E006	08/01/2024	Lead, total	0.0006 U	mg/L
G406	Compliance	E006	08/01/2024	Lithium, total	0.00900	mg/L
G406	Compliance	E006	08/01/2024	Mercury, total	0.00006 U	mg/L
G406	Compliance	E006	08/01/2024	Molybdenum, total	0.0013 J	mg/L
G406	Compliance	E006	08/01/2024	Oxidation Reduction Potential	240	mV
G406	Compliance	E006	08/01/2024	pH (field)	6.6	SU
G406	Compliance	E006	08/01/2024	Radium 226 + Radium 228, total	0.71	pCi/L
G406	Compliance	E006	08/01/2024	Selenium, total	0.0007 J	mg/L
G406	Compliance	E006	08/01/2024	Specific Conductance @ 25C (field)	1,390	micromhos/cm
G406	Compliance	E006	08/01/2024	Sulfate, total	528	mg/L
G406	Compliance	E006	08/01/2024	Temperature	18.2	degrees C
G406	Compliance	E006	08/01/2024	Thallium, total	0.001 U	mg/L
G406	Compliance	E006	08/01/2024	Total Dissolved Solids	1,070	mg/L
G406	Compliance	E006	08/01/2024	Turbidity, field	2.30	NTU
G407	Compliance	E006	08/01/2024	Antimony, total	0.0006 J	mg/L
G407	Compliance	E006	08/01/2024	Arsenic, total	0.0004 U	mg/L
G407	Compliance	E006	08/01/2024	Barium, total	0.0145	mg/L
G407	Compliance	E006	08/01/2024	Beryllium, total	0.0002 U	mg/L
G407	Compliance	E006	08/01/2024	Boron, total	0.0790	mg/L
G407	Compliance	E006	08/01/2024	Cadmium, total	0.0002 U	mg/L
G407	Compliance	E006	08/01/2024	Calcium, total	257	mg/L
G407	Compliance	E006	08/01/2024	Chloride, total	11.0	mg/L
G407	Compliance	E006	08/01/2024	Chromium, total	0.00160	mg/L
G407	Compliance	E006	08/01/2024	Cobalt, total	0.0004 J	mg/L
G407	Compliance	E006	08/01/2024	Dissolved Oxygen	0.810	mg/L
G407	Compliance	E006	08/01/2024	Fluoride, total	0.3 J	mg/L
G407	Compliance	E006	08/01/2024	Lead, total	0.0006 U	mg/L
G407	Compliance	E006	08/01/2024	Lithium, total	0.0341	mg/L
G407	Compliance	E006	08/01/2024	Mercury, total	0.00006 U	mg/L
G407	Compliance	E006	08/01/2024	Molybdenum, total	0.00210	mg/L

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

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COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G407	Compliance	E006	08/01/2024	Oxidation Reduction Potential	215	mV
G407	Compliance	E006	08/01/2024	pH (field)	6.8	SU
G407	Compliance	E006	08/01/2024	Radium 226 + Radium 228, total	3.4	pCi/L
G407	Compliance	E006	08/01/2024	Selenium, total	0.0006 U	mg/L
G407	Compliance	E006	08/01/2024	Specific Conductance @ 25C (field)	2,110	micromhos/cm
G407	Compliance	E006	08/01/2024	Sulfate, total	952	mg/L
G407	Compliance	E006	08/01/2024	Temperature	17.4	degrees C
G407	Compliance	E006	08/01/2024	Thallium, total	0.001 U	mg/L
G407	Compliance	E006	08/01/2024	Total Dissolved Solids	1,770	mg/L
G407	Compliance	E006	08/01/2024	Turbidity, field	29.0	NTU

Notes:

C = Celsius

cm = centimeter

mg/L = milligrams per liter

Missing Code (if applicable):

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

mV = millivolts

NTU = Nephelometric Turbidity Units

pCi/L = picocuries per liter

SU = Standard Units

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.

TABLE 1.**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024**

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COFFEEN POWER PLANT

ASH POND NO. 2

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**

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COFFEEN POWER PLANT

ASH POND NO. 2

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
G281	Background	E007	10/30/2024	Antimony, total	0.0004 U	mg/L
G281	Background	E007	10/30/2024	Arsenic, total	0.0005 J	mg/L
G281	Background	E007	10/30/2024	Barium, total	0.0687	mg/L
G281	Background	E007	10/30/2024	Beryllium, total	0.0002 U	mg/L
G281	Background	E007	10/30/2024	Boron, total	0.0092 U	mg/L
G281	Background	E007	10/30/2024	Cadmium, total	0.0002 U	mg/L
G281	Background	E007	10/30/2024	Calcium, total	142	mg/L
G281	Background	E007	10/30/2024	Chloride, total	55.9	mg/L
G281	Background	E007	10/30/2024	Chromium, total	0.0007 U	mg/L
G281	Background	E007	10/30/2024	Cobalt, total	0.0006 J	mg/L
G281	Background	E007	10/30/2024	Dissolved Oxygen	1.07	mg/L
G281	Background	E007	10/30/2024	Fluoride, total	0.2 U	mg/L
G281	Background	E007	10/30/2024	Lead, total	0.0006 U	mg/L
G281	Background	E007	10/30/2024	Lithium, total	0.00490	mg/L
G281	Background	E007	10/30/2024	Mercury, total	0.00006 U	mg/L
G281	Background	E007	10/30/2024	Molybdenum, total	0.0011 J	mg/L
G281	Background	E007	10/30/2024	Oxidation Reduction Potential	-14.0	mV
G281	Background	E007	10/30/2024	pH (field)	7.0	SU
G281	Background	E007	10/30/2024	Radium 226 + Radium 228, total	0.219	pCi/L
G281	Background	E007	10/30/2024	Selenium, total	0.0006 U	mg/L
G281	Background	E007	10/30/2024	Specific Conductance @ 25C (field)	1,310	micromhos/cm
G281	Background	E007	10/30/2024	Sulfate, total	317	mg/L
G281	Background	E007	10/30/2024	Temperature	17.9	degrees C
G281	Background	E007	10/30/2024	Thallium, total	0.001 U	mg/L
G281	Background	E007	10/30/2024	Total Dissolved Solids	966	mg/L
G281	Background	E007	10/30/2024	Turbidity, field	58.0	NTU
G1001	Compliance	E007	11/07/2024	Antimony, total	0.00160	mg/L
G1001	Compliance	E007	11/07/2024	Arsenic, total	0.0004 U	mg/L
G1001	Compliance	E007	11/07/2024	Barium, total	0.0787	mg/L
G1001	Compliance	E007	11/07/2024	Beryllium, total	0.0002 U	mg/L
G1001	Compliance	E007	11/07/2024	Boron, total	1.02	mg/L
G1001	Compliance	E007	11/07/2024	Cadmium, total	0.0002 U	mg/L
G1001	Compliance	E007	11/07/2024	Calcium, total	110	mg/L
G1001	Compliance	E007	11/07/2024	Chloride, total	7.79	mg/L
G1001	Compliance	E007	11/07/2024	Chromium, total	0.0007 U	mg/L
G1001	Compliance	E007	11/07/2024	Cobalt, total	0.0002 J	mg/L
G1001	Compliance	E007	11/07/2024	Dissolved Oxygen	5.08	mg/L
G1001	Compliance	E007	11/07/2024	Fluoride, total	0.24 J	mg/L
G1001	Compliance	E007	11/07/2024	Lead, total	0.0006 U	mg/L
G1001	Compliance	E007	11/07/2024	Lithium, total	0.00920	mg/L

TABLE 1.**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024**

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COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G1001	Compliance	E007	11/07/2024	Mercury, total	0.00006 U	mg/L
G1001	Compliance	E007	11/07/2024	Molybdenum, total	0.00580	mg/L
G1001	Compliance	E007	11/07/2024	Oxidation Reduction Potential	-62.0	mV
G1001	Compliance	E007	11/07/2024	pH (field)	6.9	SU
G1001	Compliance	E007	11/07/2024	Radium 226 + Radium 228, total	1.5	pCi/L
G1001	Compliance	E007	11/07/2024	Selenium, total	0.0006 U	mg/L
G1001	Compliance	E007	11/07/2024	Specific Conductance @ 25C (field)	1,150	micromhos/cm
G1001	Compliance	E007	11/07/2024	Sulfate, total	107	mg/L
G1001	Compliance	E007	11/07/2024	Temperature	16.7	degrees C
G1001	Compliance	E007	11/07/2024	Thallium, total	0.001 U	mg/L
G1001	Compliance	E007	11/07/2024	Total Dissolved Solids	666	mg/L
G1001	Compliance	E007	11/07/2024	Turbidity, field	24.0	NTU
G401	Compliance	E007	11/06/2024	Antimony, total	0.0004 U	mg/L
G401	Compliance	E007	11/06/2024	Arsenic, total	0.00120	mg/L
G401	Compliance	E007	11/06/2024	Barium, total	0.0116	mg/L
G401	Compliance	E007	11/06/2024	Beryllium, total	0.0002 U	mg/L
G401	Compliance	E007	11/06/2024	Boron, total	4.36	mg/L
G401	Compliance	E007	11/06/2024	Cadmium, total	0.0004 J	mg/L
G401	Compliance	E007	11/06/2024	Calcium, total	522	mg/L
G401	Compliance	E007	11/06/2024	Chloride, total	2.6 J	mg/L
G401	Compliance	E007	11/06/2024	Chromium, total	0.0007 U	mg/L
G401	Compliance	E007	11/06/2024	Cobalt, total	0.201	mg/L
G401	Compliance	E007	11/06/2024	Dissolved Oxygen	1.24	mg/L
G401	Compliance	E007	11/06/2024	Fluoride, total	0.2 U	mg/L
G401	Compliance	E007	11/06/2024	Lead, total	0.0006 U	mg/L
G401	Compliance	E007	11/06/2024	Lithium, total	0.0374	mg/L
G401	Compliance	E007	11/06/2024	Mercury, total	0.00006 U	mg/L
G401	Compliance	E007	11/06/2024	Molybdenum, total	0.0006 U	mg/L
G401	Compliance	E007	11/06/2024	Oxidation Reduction Potential	15.0	mV
G401	Compliance	E007	11/06/2024	pH (field)	5.6	SU
G401	Compliance	E007	11/06/2024	Radium 226 + Radium 228, total	1.6	pCi/L
G401	Compliance	E007	11/06/2024	Selenium, total	0.0006 U	mg/L
G401	Compliance	E007	11/06/2024	Specific Conductance @ 25C (field)	2,220	micromhos/cm
G401	Compliance	E007	11/06/2024	Sulfate, total	2,170	mg/L
G401	Compliance	E007	11/06/2024	Temperature	16.7	degrees C
G401	Compliance	E007	11/06/2024	Thallium, total	0.001 U	mg/L
G401	Compliance	E007	11/06/2024	Total Dissolved Solids	3,180	mg/L
G401	Compliance	E007	11/06/2024	Turbidity, field	4.10	NTU
G402	Compliance	E007	11/04/2024	Antimony, total	0.0004 U	mg/L
G402	Compliance	E007	11/04/2024	Arsenic, total	0.00100 J	mg/L
G402	Compliance	E007	11/04/2024	Barium, total	0.0196	mg/L
G402	Compliance	E007	11/04/2024	Beryllium, total	0.0002 U	mg/L
G402	Compliance	E007	11/04/2024	Boron, total	6.07	mg/L
G402	Compliance	E007	11/04/2024	Cadmium, total	0.0002 U	mg/L
G402	Compliance	E007	11/04/2024	Calcium, total	218	mg/L
G402	Compliance	E007	11/04/2024	Chloride, total	1.5 J	mg/L

TABLE 1.**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024**

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COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G402	Compliance	E007	11/04/2024	Chromium, total	0.0007 U	mg/L
G402	Compliance	E007	11/04/2024	Cobalt, total	0.0009 J	mg/L
G402	Compliance	E007	11/04/2024	Dissolved Oxygen	8.78	mg/L
G402	Compliance	E007	11/04/2024	Fluoride, total	0.22 J	mg/L
G402	Compliance	E007	11/04/2024	Lead, total	0.0006 U	mg/L
G402	Compliance	E007	11/04/2024	Lithium, total	0.0244	mg/L
G402	Compliance	E007	11/04/2024	Mercury, total	0.00006 U	mg/L
G402	Compliance	E007	11/04/2024	Molybdenum, total	0.00260	mg/L
G402	Compliance	E007	11/04/2024	Oxidation Reduction Potential	93.0	mV
G402	Compliance	E007	11/04/2024	pH (field)	7.0	SU
G402	Compliance	E007	11/04/2024	Radium 226 + Radium 228, total	0.24	pCi/L
G402	Compliance	E007	11/04/2024	Selenium, total	0.0006 U	mg/L
G402	Compliance	E007	11/04/2024	Specific Conductance @ 25C (field)	1,280	micromhos/cm
G402	Compliance	E007	11/04/2024	Sulfate, total	606	mg/L
G402	Compliance	E007	11/04/2024	Temperature	17.6	degrees C
G402	Compliance	E007	11/04/2024	Thallium, total	0.001 U	mg/L
G402	Compliance	E007	11/04/2024	Total Dissolved Solids	1,360	mg/L
G402	Compliance	E007	11/04/2024	Turbidity, field	14.0	NTU
G403	Compliance	E007	11/04/2024	Antimony, total	0.0004 U	mg/L
G403	Compliance	E007	11/04/2024	Arsenic, total	0.0007 J	mg/L
G403	Compliance	E007	11/04/2024	Barium, total	0.126	mg/L
G403	Compliance	E007	11/04/2024	Beryllium, total	0.0002 U	mg/L
G403	Compliance	E007	11/04/2024	Boron, total	0.0092 U	mg/L
G403	Compliance	E007	11/04/2024	Cadmium, total	0.0002 U	mg/L
G403	Compliance	E007	11/04/2024	Calcium, total	81.6	mg/L
G403	Compliance	E007	11/04/2024	Chloride, total	6.00	mg/L
G403	Compliance	E007	11/04/2024	Chromium, total	0.0007 U	mg/L
G403	Compliance	E007	11/04/2024	Cobalt, total	0.00190	mg/L
G403	Compliance	E007	11/04/2024	Dissolved Oxygen	1.19	mg/L
G403	Compliance	E007	11/04/2024	Fluoride, total	0.2 U	mg/L
G403	Compliance	E007	11/04/2024	Lead, total	0.0006 U	mg/L
G403	Compliance	E007	11/04/2024	Lithium, total	0.00410	mg/L
G403	Compliance	E007	11/04/2024	Mercury, total	0.00006 U	mg/L
G403	Compliance	E007	11/04/2024	Molybdenum, total	0.00250	mg/L
G403	Compliance	E007	11/04/2024	Oxidation Reduction Potential	-108	mV
G403	Compliance	E007	11/04/2024	pH (field)	6.7	SU
G403	Compliance	E007	11/04/2024	Radium 226 + Radium 228, total	0.309	pCi/L
G403	Compliance	E007	11/04/2024	Selenium, total	0.0006 U	mg/L
G403	Compliance	E007	11/04/2024	Specific Conductance @ 25C (field)	557	micromhos/cm
G403	Compliance	E007	11/04/2024	Sulfate, total	75.3	mg/L
G403	Compliance	E007	11/04/2024	Temperature	16.7	degrees C
G403	Compliance	E007	11/04/2024	Thallium, total	0.001 U	mg/L
G403	Compliance	E007	11/04/2024	Total Dissolved Solids	474	mg/L
G403	Compliance	E007	11/04/2024	Turbidity, field	20.0	NTU
G404	Compliance	E007	11/04/2024	Antimony, total	0.0004 U	mg/L
G404	Compliance	E007	11/04/2024	Arsenic, total	0.0005 J	mg/L

TABLE 1.**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024**

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COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G404	Compliance	E007	11/04/2024	Barium, total	0.0212	mg/L
G404	Compliance	E007	11/04/2024	Beryllium, total	0.0002 U	mg/L
G404	Compliance	E007	11/04/2024	Boron, total	12.0	mg/L
G404	Compliance	E007	11/04/2024	Cadmium, total	0.0002 U	mg/L
G404	Compliance	E007	11/04/2024	Calcium, total	222	mg/L
G404	Compliance	E007	11/04/2024	Chloride, total	85.9	mg/L
G404	Compliance	E007	11/04/2024	Chromium, total	0.0007 U	mg/L
G404	Compliance	E007	11/04/2024	Cobalt, total	0.0007 J	mg/L
G404	Compliance	E007	11/04/2024	Dissolved Oxygen	1.51	mg/L
G404	Compliance	E007	11/04/2024	Fluoride, total	0.2 U	mg/L
G404	Compliance	E007	11/04/2024	Lead, total	0.0006 U	mg/L
G404	Compliance	E007	11/04/2024	Lithium, total	0.00840	mg/L
G404	Compliance	E007	11/04/2024	Mercury, total	0.00006 U	mg/L
G404	Compliance	E007	11/04/2024	Molybdenum, total	0.001 J	mg/L
G404	Compliance	E007	11/04/2024	Oxidation Reduction Potential	76.0	mV
G404	Compliance	E007	11/04/2024	pH (field)	6.4	SU
G404	Compliance	E007	11/04/2024	Radium 226 + Radium 228, total	1.05	pCi/L
G404	Compliance	E007	11/04/2024	Selenium, total	0.0006 U	mg/L
G404	Compliance	E007	11/04/2024	Specific Conductance @ 25C (field)	1,670	micromhos/cm
G404	Compliance	E007	11/04/2024	Sulfate, total	693	mg/L
G404	Compliance	E007	11/04/2024	Temperature	17.5	degrees C
G404	Compliance	E007	11/04/2024	Thallium, total	0.001 U	mg/L
G404	Compliance	E007	11/04/2024	Total Dissolved Solids	1,480	mg/L
G404	Compliance	E007	11/04/2024	Turbidity, field	9.90	NTU
G405	Compliance	E007	11/04/2024	Antimony, total	0.0005 J	mg/L
G405	Compliance	E007	11/04/2024	Arsenic, total	0.0008 J	mg/L
G405	Compliance	E007	11/04/2024	Barium, total	0.0151	mg/L
G405	Compliance	E007	11/04/2024	Beryllium, total	0.0002 U	mg/L
G405	Compliance	E007	11/04/2024	Boron, total	10.7	mg/L
G405	Compliance	E007	11/04/2024	Cadmium, total	0.0002 J	mg/L
G405	Compliance	E007	11/04/2024	Calcium, total	253	mg/L
G405	Compliance	E007	11/04/2024	Chloride, total	23.7	mg/L
G405	Compliance	E007	11/04/2024	Chromium, total	0.0007 U	mg/L
G405	Compliance	E007	11/04/2024	Cobalt, total	0.00100	mg/L
G405	Compliance	E007	11/04/2024	Dissolved Oxygen	1.20	mg/L
G405	Compliance	E007	11/04/2024	Fluoride, total	0.34 J	mg/L
G405	Compliance	E007	11/04/2024	Lead, total	0.0006 U	mg/L
G405	Compliance	E007	11/04/2024	Lithium, total	0.00360	mg/L
G405	Compliance	E007	11/04/2024	Mercury, total	0.00006 U	mg/L
G405	Compliance	E007	11/04/2024	Molybdenum, total	0.001 J	mg/L
G405	Compliance	E007	11/04/2024	Oxidation Reduction Potential	1.00	mV
G405	Compliance	E007	11/04/2024	pH (field)	6.7	SU
G405	Compliance	E007	11/04/2024	Radium 226 + Radium 228, total	0.65	pCi/L
G405	Compliance	E007	11/04/2024	Selenium, total	0.0006 U	mg/L
G405	Compliance	E007	11/04/2024	Specific Conductance @ 25C (field)	1,530	micromhos/cm
G405	Compliance	E007	11/04/2024	Sulfate, total	994	mg/L

TABLE 1.**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024**

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COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G405	Compliance	E007	11/04/2024	Temperature	17.7	degrees C
G405	Compliance	E007	11/04/2024	Thallium, total	0.001 U	mg/L
G405	Compliance	E007	11/04/2024	Total Dissolved Solids	1,820	mg/L
G405	Compliance	E007	11/04/2024	Turbidity, field	38.0	NTU
G406	Compliance	E007	11/04/2024	Antimony, total	0.0004 U	mg/L
G406	Compliance	E007	11/04/2024	Arsenic, total	0.0004 U	mg/L
G406	Compliance	E007	11/04/2024	Barium, total	0.0131	mg/L
G406	Compliance	E007	11/04/2024	Beryllium, total	0.0002 U	mg/L
G406	Compliance	E007	11/04/2024	Boron, total	1.53	mg/L
G406	Compliance	E007	11/04/2024	Cadmium, total	0.0002 U	mg/L
G406	Compliance	E007	11/04/2024	Calcium, total	195	mg/L
G406	Compliance	E007	11/04/2024	Chloride, total	3.4 J	mg/L
G406	Compliance	E007	11/04/2024	Chromium, total	0.0007 U	mg/L
G406	Compliance	E007	11/04/2024	Cobalt, total	0.0007 J	mg/L
G406	Compliance	E007	11/04/2024	Dissolved Oxygen	1.30	mg/L
G406	Compliance	E007	11/04/2024	Fluoride, total	0.21 J	mg/L
G406	Compliance	E007	11/04/2024	Lead, total	0.0006 U	mg/L
G406	Compliance	E007	11/04/2024	Lithium, total	0.0123	mg/L
G406	Compliance	E007	11/04/2024	Mercury, total	0.00006 U	mg/L
G406	Compliance	E007	11/04/2024	Molybdenum, total	0.0006 U	mg/L
G406	Compliance	E007	11/04/2024	Oxidation Reduction Potential	107	mV
G406	Compliance	E007	11/04/2024	pH (field)	6.4	SU
G406	Compliance	E007	11/04/2024	Radium 226 + Radium 228, total	0.446	pCi/L
G406	Compliance	E007	11/04/2024	Selenium, total	0.0006 U	mg/L
G406	Compliance	E007	11/04/2024	Specific Conductance @ 25C (field)	996	micromhos/cm
G406	Compliance	E007	11/04/2024	Sulfate, total	508	mg/L
G406	Compliance	E007	11/04/2024	Temperature	17.4	degrees C
G406	Compliance	E007	11/04/2024	Thallium, total	0.001 U	mg/L
G406	Compliance	E007	11/04/2024	Total Dissolved Solids	1,060	mg/L
G406	Compliance	E007	11/04/2024	Turbidity, field	4.50	NTU
G407	Compliance	E007	11/04/2024	Antimony, total	0.0004 U	mg/L
G407	Compliance	E007	11/04/2024	Arsenic, total	0.0005 J	mg/L
G407	Compliance	E007	11/04/2024	Barium, total	0.0136	mg/L
G407	Compliance	E007	11/04/2024	Beryllium, total	0.0002 U	mg/L
G407	Compliance	E007	11/04/2024	Boron, total	0.0917	mg/L
G407	Compliance	E007	11/04/2024	Cadmium, total	0.0002 U	mg/L
G407	Compliance	E007	11/04/2024	Calcium, total	265	mg/L
G407	Compliance	E007	11/04/2024	Chloride, total	10.0	mg/L
G407	Compliance	E007	11/04/2024	Chromium, total	0.0012 J	mg/L
G407	Compliance	E007	11/04/2024	Cobalt, total	0.0007 J	mg/L
G407	Compliance	E007	11/04/2024	Dissolved Oxygen	1.43	mg/L
G407	Compliance	E007	11/04/2024	Fluoride, total	0.23 J	mg/L
G407	Compliance	E007	11/04/2024	Lead, total	0.0006 U	mg/L
G407	Compliance	E007	11/04/2024	Lithium, total	0.0448	mg/L
G407	Compliance	E007	11/04/2024	Mercury, total	0.00006 U	mg/L
G407	Compliance	E007	11/04/2024	Molybdenum, total	0.00180	mg/L

TABLE 1.**FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024**

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COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G407	Compliance	E007	11/04/2024	Oxidation Reduction Potential	29.0	mV
G407	Compliance	E007	11/04/2024	pH (field)	6.6	SU
G407	Compliance	E007	11/04/2024	Radium 226 + Radium 228, total	0.0857	pCi/L
G407	Compliance	E007	11/04/2024	Selenium, total	0.0006 U	mg/L
G407	Compliance	E007	11/04/2024	Specific Conductance @ 25C (field)	1,710	micromhos/cm
G407	Compliance	E007	11/04/2024	Sulfate, total	977	mg/L
G407	Compliance	E007	11/04/2024	Temperature	17.3	degrees C
G407	Compliance	E007	11/04/2024	Thallium, total	0.001 U	mg/L
G407	Compliance	E007	11/04/2024	Total Dissolved Solids	1,830	mg/L
G407	Compliance	E007	11/04/2024	Turbidity, field	2.60	NTU

Notes:

C = Celsius

cm = centimeter

Events:

E007 = Quarter 4, 2024 sampling event

mg/L = milligrams per liter

mV = millivolts

NTU = Nephelometric Turbidity Units

pCi/L = picocuries per liter

Result Code (if applicable):

NR¹ = Parameter not analyzed.NS¹ = Well has been, or will be, abandoned; therefore, a sample was not collected.NS² = Well either needs or was undergoing maintenance; therefore, a sample was not collected.NS³ = The location was not accessible; therefore, a sample was not collected.NS⁴ = The location could not be found; therefore, a sample was not collected.NS⁵ = The location was damaged; therefore, a sample was not collected.NS⁶ = Sampling pump could not yield a sample.NS⁷ = Well was either dry or purged dry and did not recover sufficiently to yield adequate volume for a sample.NS⁸ = A sample was not collected.PM¹ = Parameter not analyzed as the well purged dry during sample collection and did not sufficiently recover to yield adequate sample volume for analysis.Result qualifiers as defined in the United States Environmental Protection Agency's *National Functional Guidelines for Inorganic Superfund Methods Data Review*, EPA 542-R-20-006. November 2020.:

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

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
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G1001	LCU	E004	Antimony, total	mg/L	02/15/23 - 02/15/24	4	75	CI around median (Last Sample, n<7)	0.001	0.006	Standard	No Exceedance
G1001	LCU	E004	Arsenic, total	mg/L	02/15/23 - 02/15/24	4	50	CI around geomean	0.000128	0.010	Standard	No Exceedance
G1001	LCU	E004	Barium, total	mg/L	02/15/23 - 02/15/24	4	0	CI around mean	-0.0407	2.0	Standard	No Exceedance
G1001	LCU	E004	Beryllium, total	mg/L	02/15/23 - 02/15/24	4	75	CI around median (Last Sample, n<7)	0.001	0.004	Standard	No Exceedance
G1001	LCU	E004	Boron, total	mg/L	05/12/21 - 02/15/24	5	0	CI around mean	0.614	2	Standard	No Exceedance
G1001	LCU	E004	Cadmium, total	mg/L	02/15/23 - 02/15/24	4	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G1001	LCU	E004	Chloride, total	mg/L	05/12/21 - 02/15/24	5	0	CI around mean	8.05	200	Standard	No Exceedance
G1001	LCU	E004	Chromium, total	mg/L	02/15/23 - 02/15/24	4	50	CI around geomean	0.000178	0.1	Standard	No Exceedance
G1001	LCU	E004	Cobalt, total	mg/L	05/12/21 - 02/15/24	5	60	CI around median (Last Sample, n<7)	0.001	0.006	Standard	No Exceedance
G1001	LCU	E004	Fluoride, total	mg/L	02/15/23 - 02/15/24	4	50	CI around median (Last Sample, n<7)	0.25	4.0	Standard	No Exceedance
G1001	LCU	E004	Lead, total	mg/L	02/15/23 - 02/15/24	4	50	CI around median (Last Sample, n<7)	0.001	0.0120	Background	No Exceedance
G1001	LCU	E004	Lithium, total	mg/L	05/12/21 - 02/15/24	5	20	CI around mean	0.000345	0.04	Standard	No Exceedance
G1001	LCU	E004	Mercury, total	mg/L	02/15/23 - 02/15/24	4	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G1001	LCU	E004	Molybdenum, total	mg/L	02/15/23 - 02/15/24	4	0	CI around mean	-0.000264	0.1	Standard	No Exceedance
G1001	LCU	E004	pH (field)	SU	02/15/23 - 02/15/24	4	0	CI around median (Last Sample, n<7)	7.0/7.0	6.5/9.0	Standard/Standard	No Exceedance
G1001	LCU	E004	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 02/15/24	4	0	CI around mean	-3.72	5	Standard	No Exceedance
G1001	LCU	E004	Selenium, total	mg/L	02/15/23 - 02/15/24	4	75	CI around median (Last Sample, n<7)	0.001	0.05	Standard	No Exceedance
G1001	LCU	E004	Sulfate, total	mg/L	05/12/21 - 02/15/24	5	0	CI around mean	-6.24	400	Standard	No Exceedance
G1001	LCU	E004	Thallium, total	mg/L	02/15/23 - 02/15/24	4	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G1001	LCU	E004	Total Dissolved Solids	mg/L	02/15/23 - 02/15/24	4	0	CI around mean	232	1,200	Standard	No Exceedance
G401	UA	E004	Antimony, total	mg/L	11/21/15 - 02/21/24	25	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G401	UA	E004	Arsenic, total	mg/L	11/21/15 - 02/21/24	28	50	CB around T-S line	-0.0153	0.010	Standard	No Exceedance
G401	UA	E004	Barium, total	mg/L	11/21/15 - 02/21/24	28	0	CB around T-S line	-0.183	2.0	Standard	No Exceedance
G401	UA	E004	Beryllium, total	mg/L	11/21/15 - 02/21/24	27	82	CI around median	0.001	0.004	Standard	No Exceedance
G401	UA	E004	Boron, total	mg/L	11/21/15 - 02/21/24	29	0	CI around median	3.6	2	Standard	Exceedance
G401	UA	E004	Cadmium, total	mg/L	11/21/15 - 02/21/24	28	68	CB around T-S line	-0.00174	0.005	Standard	No Exceedance
G401	UA	E004	Chloride, total	mg/L	11/21/15 - 02/21/24	29	10	CI around geomean	2.93	200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G401	UA	E004	Chromium, total	mg/L	11/21/15 - 02/21/24	28	68	CB around T-S line	-0.0283	0.1	Standard	No Exceedance
G401	UA	E004	Cobalt, total	mg/L	11/21/15 - 02/21/24	28	0	CB around linear reg	0.0693	0.006	Standard	Exceedance
G401	UA	E004	Fluoride, total	mg/L	11/21/15 - 02/21/24	29	86	CB around T-S line	0.222	4.0	Standard	No Exceedance
G401	UA	E004	Lead, total	mg/L	11/21/15 - 02/21/24	27	67	CB around T-S line	-0.0276	0.0120	Background	No Exceedance
G401	UA	E004	Lithium, total	mg/L	11/21/15 - 02/21/24	30	3	CB around T-S line	-0.00613	0.04	Standard	No Exceedance
G401	UA	E004	Mercury, total	mg/L	11/21/15 - 02/21/24	27	82	CI around median	0.0002	0.002	Standard	No Exceedance
G401	UA	E004	Molybdenum, total	mg/L	11/21/15 - 02/21/24	28	71	CI around median	0.001	0.1	Standard	No Exceedance
G401	UA	E004	pH (field)	SU	11/21/15 - 02/21/24	31	0	CI around mean	5.9/6.1	6.5/9.0	Standard/Standard	Exceedance
G401	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 02/21/24	28	0	CI around geomean	0.477	5	Standard	No Exceedance
G401	UA	E004	Selenium, total	mg/L	11/21/15 - 02/21/24	28	64	CB around T-S line	-0.00157	0.05	Standard	No Exceedance
G401	UA	E004	Sulfate, total	mg/L	11/21/15 - 02/21/24	29	0	CI around median	2,000	400	Standard	Exceedance
G401	UA	E004	Thallium, total	mg/L	11/21/15 - 02/21/24	25	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G401	UA	E004	Total Dissolved Solids	mg/L	11/21/15 - 02/21/24	29	0	CI around median	2,800	1,200	Standard	Exceedance
G402	UA	E004	Antimony, total	mg/L	11/21/15 - 02/21/24	25	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G402	UA	E004	Arsenic, total	mg/L	11/21/15 - 02/21/24	28	0	CB around linear reg	-0.00498	0.010	Standard	No Exceedance
G402	UA	E004	Barium, total	mg/L	11/21/15 - 02/21/24	28	0	CB around linear reg	-0.00128	2.0	Standard	No Exceedance
G402	UA	E004	Beryllium, total	mg/L	11/21/15 - 02/21/24	27	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G402	UA	E004	Boron, total	mg/L	11/21/15 - 02/21/24	29	0	CB around T-S line	4.27	2	Standard	Exceedance
G402	UA	E004	Cadmium, total	mg/L	11/21/15 - 02/21/24	28	96	Most recent sample	0.001	0.005	Standard	No Exceedance
G402	UA	E004	Chloride, total	mg/L	11/21/15 - 02/21/24	29	24	CI around mean	1.6	200	Standard	No Exceedance
G402	UA	E004	Chromium, total	mg/L	11/21/15 - 02/21/24	28	43	CB around T-S line	-0.00593	0.1	Standard	No Exceedance
G402	UA	E004	Cobalt, total	mg/L	11/21/15 - 02/21/24	28	21	CB around linear reg	-0.00283	0.006	Standard	No Exceedance
G402	UA	E004	Fluoride, total	mg/L	11/21/15 - 02/21/24	29	14	CI around median	0.295	4.0	Standard	No Exceedance
G402	UA	E004	Lead, total	mg/L	11/21/15 - 02/21/24	27	30	CB around linear reg	-0.00408	0.0120	Background	No Exceedance
G402	UA	E004	Lithium, total	mg/L	11/21/15 - 02/21/24	28	4	CB around linear reg	0.0113	0.04	Standard	No Exceedance
G402	UA	E004	Mercury, total	mg/L	11/21/15 - 02/21/24	27	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G402	UA	E004	Molybdenum, total	mg/L	11/21/15 - 02/21/24	28	0	CB around linear reg	0.00102	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G402	UA	E004	pH (field)	SU	11/21/15 - 02/21/24	29	0	CI around mean	6.7/6.8	6.5/9.0	Standard/Standard	No Exceedance
G402	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 02/21/24	28	0	CI around median	0.547	5	Standard	No Exceedance
G402	UA	E004	Selenium, total	mg/L	11/21/15 - 02/21/24	28	79	CB around T-S line	0.000599	0.05	Standard	No Exceedance
G402	UA	E004	Sulfate, total	mg/L	11/21/15 - 02/21/24	29	0	CB around T-S line	379	400	Standard	No Exceedance
G402	UA	E004	Thallium, total	mg/L	11/21/15 - 02/21/24	25	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G402	UA	E004	Total Dissolved Solids	mg/L	11/21/15 - 02/21/24	29	0	CB around linear reg	1,260	1,200	Standard	Exceedance
G403	UA	E004	Antimony, total	mg/L	11/23/15 - 02/21/24	25	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G403	UA	E004	Arsenic, total	mg/L	11/23/15 - 02/21/24	28	61	CB around T-S line	0.000114	0.010	Standard	No Exceedance
G403	UA	E004	Barium, total	mg/L	11/23/15 - 02/21/24	28	0	CB around T-S line	0.0798	2.0	Standard	No Exceedance
G403	UA	E004	Beryllium, total	mg/L	11/23/15 - 02/21/24	27	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G403	UA	E004	Boron, total	mg/L	11/23/15 - 02/21/24	29	17	CI around geomean	0.0163	2	Standard	No Exceedance
G403	UA	E004	Cadmium, total	mg/L	11/23/15 - 02/21/24	28	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G403	UA	E004	Chloride, total	mg/L	11/23/15 - 02/21/24	29	0	CB around linear reg	4.49	200	Standard	No Exceedance
G403	UA	E004	Chromium, total	mg/L	11/23/15 - 02/21/24	28	93	CB around T-S line	0.00207	0.1	Standard	No Exceedance
G403	UA	E004	Cobalt, total	mg/L	11/23/15 - 02/21/24	28	57	CI around median	0.002	0.006	Standard	No Exceedance
G403	UA	E004	Fluoride, total	mg/L	11/23/15 - 02/21/24	29	10	CB around T-S line	0.216	4.0	Standard	No Exceedance
G403	UA	E004	Lead, total	mg/L	11/23/15 - 02/21/24	27	89	CI around median	0.001	0.0120	Background	No Exceedance
G403	UA	E004	Lithium, total	mg/L	11/23/15 - 02/21/24	28	93	CI around median	0.01	0.04	Standard	No Exceedance
G403	UA	E004	Mercury, total	mg/L	11/23/15 - 02/21/24	27	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G403	UA	E004	Molybdenum, total	mg/L	11/23/15 - 02/21/24	28	75	CI around median	0.001	0.1	Standard	No Exceedance
G403	UA	E004	pH (field)	SU	11/23/15 - 02/21/24	29	0	CI around mean	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance
G403	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/23/15 - 02/21/24	28	0	CI around mean	0.61	5	Standard	No Exceedance
G403	UA	E004	Selenium, total	mg/L	11/23/15 - 02/21/24	28	96	CI around median	0.001	0.05	Standard	No Exceedance
G403	UA	E004	Sulfate, total	mg/L	11/23/15 - 02/21/24	29	0	CB around T-S line	57.3	400	Standard	No Exceedance
G403	UA	E004	Thallium, total	mg/L	11/23/15 - 02/21/24	25	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G403	UA	E004	Total Dissolved Solids	mg/L	11/23/15 - 02/21/24	29	0	CB around linear reg	391	1,200	Standard	No Exceedance
G404	UA	E004	Antimony, total	mg/L	11/21/15 - 02/21/24	25	96	CB around T-S line	0.00244	0.006	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G404	UA	E004	Arsenic, total	mg/L	11/21/15 - 02/21/24	28	86	CI around median	0.001	0.010	Standard	No Exceedance
G404	UA	E004	Barium, total	mg/L	11/21/15 - 02/21/24	28	0	CB around linear reg	0.0216	2.0	Standard	No Exceedance
G404	UA	E004	Beryllium, total	mg/L	11/21/15 - 02/21/24	27	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G404	UA	E004	Boron, total	mg/L	11/21/15 - 02/21/24	29	0	CB around linear reg	6.77	2	Standard	Exceedance
G404	UA	E004	Cadmium, total	mg/L	11/21/15 - 02/21/24	28	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G404	UA	E004	Chloride, total	mg/L	11/21/15 - 02/21/24	29	0	CB around linear reg	103	200	Standard	No Exceedance
G404	UA	E004	Chromium, total	mg/L	11/21/15 - 02/21/24	28	97	CB around T-S line	0.004	0.1	Standard	No Exceedance
G404	UA	E004	Cobalt, total	mg/L	11/21/15 - 02/21/24	28	93	CI around median	0.002	0.006	Standard	No Exceedance
G404	UA	E004	Fluoride, total	mg/L	11/21/15 - 02/21/24	29	73	CI around median	0.25	4.0	Standard	No Exceedance
G404	UA	E004	Lead, total	mg/L	11/21/15 - 02/21/24	27	96	CI around median	0.001	0.0120	Background	No Exceedance
G404	UA	E004	Lithium, total	mg/L	11/21/15 - 02/21/24	28	79	CB around T-S line	0.01	0.04	Standard	No Exceedance
G404	UA	E004	Mercury, total	mg/L	11/21/15 - 02/21/24	27	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G404	UA	E004	Molybdenum, total	mg/L	11/21/15 - 02/21/24	28	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G404	UA	E004	pH (field)	SU	11/21/15 - 02/21/24	29	0	CB around linear reg	6.5/6.8	6.5/9.0	Standard/Standard	No Exceedance
G404	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 02/21/24	28	0	CI around mean	0.601	5	Standard	No Exceedance
G404	UA	E004	Selenium, total	mg/L	11/21/15 - 02/21/24	28	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G404	UA	E004	Sulfate, total	mg/L	11/21/15 - 02/21/24	29	0	CB around linear reg	446	400	Standard	Exceedance
G404	UA	E004	Thallium, total	mg/L	11/21/15 - 02/21/24	25	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G404	UA	E004	Total Dissolved Solids	mg/L	11/21/15 - 02/21/24	29	0	CB around linear reg	1,230	1,200	Standard	Exceedance
G405	UA	E004	Antimony, total	mg/L	11/21/15 - 02/21/24	25	92	CB around T-S line	0.00231	0.006	Standard	No Exceedance
G405	UA	E004	Arsenic, total	mg/L	11/21/15 - 02/21/24	28	31	CB around T-S line	-0.00229	0.010	Standard	No Exceedance
G405	UA	E004	Barium, total	mg/L	11/21/15 - 02/21/24	28	0	CB around linear reg	0.00807	2.0	Standard	No Exceedance
G405	UA	E004	Beryllium, total	mg/L	11/21/15 - 02/21/24	27	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G405	UA	E004	Boron, total	mg/L	11/21/15 - 02/21/24	29	0	CI around mean	9.39	2	Standard	Exceedance
G405	UA	E004	Cadmium, total	mg/L	11/21/15 - 02/21/24	28	97	CI around median	0.001	0.005	Standard	No Exceedance
G405	UA	E004	Chloride, total	mg/L	11/21/15 - 02/21/24	29	0	CI around geomean	9.4	200	Standard	No Exceedance
G405	UA	E004	Chromium, total	mg/L	11/21/15 - 02/21/24	28	90	CB around T-S line	0.00342	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G405	UA	E004	Cobalt, total	mg/L	11/21/15 - 02/21/24	28	66	CB around T-S line	0.000987	0.006	Standard	No Exceedance
G405	UA	E004	Fluoride, total	mg/L	11/21/15 - 02/21/24	29	10	CB around linear reg	0.232	4.0	Standard	No Exceedance
G405	UA	E004	Lead, total	mg/L	11/21/15 - 02/21/24	27	50	CB around T-S line	-0.00128	0.0120	Background	No Exceedance
G405	UA	E004	Lithium, total	mg/L	11/21/15 - 02/21/24	28	89	CI around median	0.01	0.04	Standard	No Exceedance
G405	UA	E004	Mercury, total	mg/L	11/21/15 - 02/21/24	27	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G405	UA	E004	Molybdenum, total	mg/L	11/21/15 - 02/21/24	28	41	CI around median	0.001	0.1	Standard	No Exceedance
G405	UA	E004	pH (field)	SU	11/21/15 - 02/21/24	29	0	CI around mean	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance
G405	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 02/21/24	28	0	CI around median	0.541	5	Standard	No Exceedance
G405	UA	E004	Selenium, total	mg/L	11/21/15 - 02/21/24	28	90	CI around median	0.001	0.05	Standard	No Exceedance
G405	UA	E004	Sulfate, total	mg/L	11/21/15 - 02/21/24	29	0	CI around mean	899	400	Standard	Exceedance
G405	UA	E004	Thallium, total	mg/L	11/21/15 - 02/21/24	25	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G405	UA	E004	Total Dissolved Solids	mg/L	11/21/15 - 02/21/24	29	0	CI around mean	1,550	1,200	Standard	Exceedance
G406	UA	E004	Antimony, total	mg/L	10/14/20 - 02/21/24	14	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G406	UA	E004	Arsenic, total	mg/L	10/14/20 - 02/21/24	14	93	CI around median	0.001	0.010	Standard	No Exceedance
G406	UA	E004	Barium, total	mg/L	10/14/20 - 02/21/24	14	0	CI around median	0.0124	2.0	Standard	No Exceedance
G406	UA	E004	Beryllium, total	mg/L	10/14/20 - 02/21/24	14	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G406	UA	E004	Boron, total	mg/L	10/14/20 - 02/21/24	14	0	CI around median	1.4	2	Standard	No Exceedance
G406	UA	E004	Cadmium, total	mg/L	10/14/20 - 02/21/24	14	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G406	UA	E004	Chloride, total	mg/L	10/14/20 - 02/21/24	14	14	CI around mean	2.99	200	Standard	No Exceedance
G406	UA	E004	Chromium, total	mg/L	10/14/20 - 02/21/24	14	93	CB around T-S line	0.00101	0.1	Standard	No Exceedance
G406	UA	E004	Cobalt, total	mg/L	10/14/20 - 02/21/24	14	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G406	UA	E004	Fluoride, total	mg/L	10/14/20 - 02/21/24	14	14	CI around mean	0.237	4.0	Standard	No Exceedance
G406	UA	E004	Lead, total	mg/L	10/14/20 - 02/21/24	14	93	CI around median	0.001	0.0120	Background	No Exceedance
G406	UA	E004	Lithium, total	mg/L	10/14/20 - 02/21/24	14	79	CB around T-S line	0.0127	0.04	Standard	No Exceedance
G406	UA	E004	Mercury, total	mg/L	10/14/20 - 02/21/24	14	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G406	UA	E004	Molybdenum, total	mg/L	10/14/20 - 02/21/24	14	93	CI around median	0.001	0.1	Standard	No Exceedance
G406	UA	E004	pH (field)	SU	10/14/20 - 02/21/24	14	0	CI around mean	6.5/6.7	6.5/9.0	Standard/Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G406	UA	E004	Radium 226 + Radium 228, total	pCi/L	10/14/20 - 02/21/24	14	0	CI around mean	0.283	5	Standard	No Exceedance
G406	UA	E004	Selenium, total	mg/L	10/14/20 - 02/21/24	14	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G406	UA	E004	Sulfate, total	mg/L	10/14/20 - 02/21/24	14	0	CI around median	450	400	Standard	Exceedance
G406	UA	E004	Thallium, total	mg/L	10/14/20 - 02/21/24	14	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G406	UA	E004	Total Dissolved Solids	mg/L	10/14/20 - 02/21/24	14	0	CI around mean	1,010	1,200	Standard	No Exceedance
G407	UA	E004	Antimony, total	mg/L	10/14/20 - 02/20/24	14	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G407	UA	E004	Arsenic, total	mg/L	10/14/20 - 02/20/24	14	86	CI around median	0.001	0.010	Standard	No Exceedance
G407	UA	E004	Barium, total	mg/L	10/14/20 - 02/20/24	14	0	CI around median	0.012	2.0	Standard	No Exceedance
G407	UA	E004	Beryllium, total	mg/L	10/14/20 - 02/20/24	14	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G407	UA	E004	Boron, total	mg/L	10/14/20 - 02/20/24	14	0	CI around mean	0.0755	2	Standard	No Exceedance
G407	UA	E004	Cadmium, total	mg/L	10/14/20 - 02/20/24	14	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G407	UA	E004	Chloride, total	mg/L	10/14/20 - 02/20/24	14	0	CI around geomean	11.4	200	Standard	No Exceedance
G407	UA	E004	Chromium, total	mg/L	10/14/20 - 02/20/24	14	79	CI around median	0.0018	0.1	Standard	No Exceedance
G407	UA	E004	Cobalt, total	mg/L	10/14/20 - 02/20/24	14	86	CI around median	0.002	0.006	Standard	No Exceedance
G407	UA	E004	Fluoride, total	mg/L	10/14/20 - 02/20/24	14	21	CI around geomean	0.265	4.0	Standard	No Exceedance
G407	UA	E004	Lead, total	mg/L	10/14/20 - 02/20/24	14	93	CI around median	0.001	0.0120	Background	No Exceedance
G407	UA	E004	Lithium, total	mg/L	10/14/20 - 02/20/24	14	0	CI around median	0.038	0.04	Standard	No Exceedance
G407	UA	E004	Mercury, total	mg/L	10/14/20 - 02/20/24	14	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G407	UA	E004	Molybdenum, total	mg/L	10/14/20 - 02/20/24	14	21	CI around median	0.0013	0.1	Standard	No Exceedance
G407	UA	E004	pH (field)	SU	10/14/20 - 02/20/24	14	0	CI around mean	6.6/6.7	6.5/9.0	Standard/Standard	No Exceedance
G407	UA	E004	Radium 226 + Radium 228, total	pCi/L	10/14/20 - 02/20/24	14	0	CI around mean	0.263	5	Standard	No Exceedance
G407	UA	E004	Selenium, total	mg/L	10/14/20 - 02/20/24	14	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G407	UA	E004	Sulfate, total	mg/L	10/14/20 - 02/20/24	14	0	CI around median	830	400	Standard	Exceedance
G407	UA	E004	Thallium, total	mg/L	10/14/20 - 02/20/24	14	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G407	UA	E004	Total Dissolved Solids	mg/L	10/14/20 - 02/20/24	14	0	CI around mean	1,920	1,200	Standard	Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
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:

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
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G1001	LCU	E005	Antimony, total	mg/L	02/15/23 - 05/07/24	5	80	CI around median (Last Sample, n<7)	0.001	0.006	Standard	No Exceedance
G1001	LCU	E005	Arsenic, total	mg/L	02/15/23 - 05/07/24	5	60	CI around median (Last Sample, n<7)	0.001	0.010	Standard	No Exceedance
G1001	LCU	E005	Barium, total	mg/L	02/15/23 - 05/07/24	5	0	CI around mean	-0.00928	2.0	Standard	No Exceedance
G1001	LCU	E005	Beryllium, total	mg/L	02/15/23 - 05/07/24	5	80	CI around median (Last Sample, n<7)	0.001	0.004	Standard	No Exceedance
G1001	LCU	E005	Boron, total	mg/L	05/12/21 - 05/07/24	6	0	CI around mean	0.669	2	Standard	No Exceedance
G1001	LCU	E005	Cadmium, total	mg/L	02/15/23 - 05/07/24	5	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G1001	LCU	E005	Chloride, total	mg/L	05/12/21 - 05/07/24	6	0	CI around mean	7.65	200	Standard	No Exceedance
G1001	LCU	E005	Chromium, total	mg/L	02/15/23 - 05/07/24	5	40	CI around geomean	0.000462	0.1	Standard	No Exceedance
G1001	LCU	E005	Cobalt, total	mg/L	05/12/21 - 05/07/24	6	67	CI around median (Last Sample, n<7)	0.001	0.006	Standard	No Exceedance
G1001	LCU	E005	Fluoride, total	mg/L	02/15/23 - 05/07/24	5	40	CI around mean	0.222	4.0	Standard	No Exceedance
G1001	LCU	E005	Lead, total	mg/L	02/15/23 - 05/07/24	5	60	CI around median (Last Sample, n<7)	0.001	0.0120	Background	No Exceedance
G1001	LCU	E005	Lithium, total	mg/L	05/12/21 - 05/07/24	6	17	CI around mean	0.00186	0.04	Standard	No Exceedance
G1001	LCU	E005	Mercury, total	mg/L	02/15/23 - 05/07/24	5	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G1001	LCU	E005	Molybdenum, total	mg/L	02/15/23 - 05/07/24	5	0	CI around mean	0.0024	0.1	Standard	No Exceedance
G1001	LCU	E005	pH (field)	SU	02/15/23 - 05/07/24	5	0	CI around mean	6.8/7.1	6.5/9.0	Standard/Standard	No Exceedance
G1001	LCU	E005	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 05/07/24	5	0	CI around geomean	0.219	5	Standard	No Exceedance
G1001	LCU	E005	Selenium, total	mg/L	02/15/23 - 05/07/24	5	80	CI around median (Last Sample, n<7)	0.001	0.05	Standard	No Exceedance
G1001	LCU	E005	Sulfate, total	mg/L	05/12/21 - 05/07/24	6	0	CI around mean	34.3	400	Standard	No Exceedance
G1001	LCU	E005	Thallium, total	mg/L	02/15/23 - 05/07/24	5	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G1001	LCU	E005	Total Dissolved Solids	mg/L	02/15/23 - 05/07/24	5	0	CI around mean	426	1,200	Standard	No Exceedance
G401	UA	E005	Antimony, total	mg/L	11/21/15 - 05/02/24	26	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G401	UA	E005	Arsenic, total	mg/L	11/21/15 - 05/02/24	29	52	CB around T-S line	-0.0152	0.010	Standard	No Exceedance
G401	UA	E005	Barium, total	mg/L	11/21/15 - 05/02/24	29	0	CB around T-S line	-0.166	2.0	Standard	No Exceedance
G401	UA	E005	Beryllium, total	mg/L	11/21/15 - 05/02/24	28	82	CI around median	0.001	0.004	Standard	No Exceedance
G401	UA	E005	Boron, total	mg/L	11/21/15 - 05/02/24	30	0	CI around median	3.5	2	Standard	Exceedance
G401	UA	E005	Cadmium, total	mg/L	11/21/15 - 05/02/24	29	69	CB around T-S line	-0.00171	0.005	Standard	No Exceedance
G401	UA	E005	Chloride, total	mg/L	11/21/15 - 05/02/24	30	10	CI around geomean	3	200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G401	UA	E005	Chromium, total	mg/L	11/21/15 - 05/02/24	29	69	CB around T-S line	-0.034	0.1	Standard	No Exceedance
G401	UA	E005	Cobalt, total	mg/L	11/21/15 - 05/02/24	29	0	CB around linear reg	0.0574	0.006	Standard	Exceedance
G401	UA	E005	Fluoride, total	mg/L	11/21/15 - 05/02/24	30	83	CB around T-S line	0.222	4.0	Standard	No Exceedance
G401	UA	E005	Lead, total	mg/L	11/21/15 - 05/02/24	28	68	CB around T-S line	-0.0194	0.0120	Background	No Exceedance
G401	UA	E005	Lithium, total	mg/L	11/21/15 - 05/02/24	31	3	CB around T-S line	-0.00462	0.04	Standard	No Exceedance
G401	UA	E005	Mercury, total	mg/L	11/21/15 - 05/02/24	28	82	CI around median	0.0002	0.002	Standard	No Exceedance
G401	UA	E005	Molybdenum, total	mg/L	11/21/15 - 05/02/24	29	72	CI around median	0.001	0.1	Standard	No Exceedance
G401	UA	E005	pH (field)	SU	11/21/15 - 05/02/24	32	0	CI around mean	5.9/6.1	6.5/9.0	Standard/Standard	Exceedance
G401	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 05/02/24	29	0	CI around geomean	0.468	5	Standard	No Exceedance
G401	UA	E005	Selenium, total	mg/L	11/21/15 - 05/02/24	29	66	CB around T-S line	-0.00176	0.05	Standard	No Exceedance
G401	UA	E005	Sulfate, total	mg/L	11/21/15 - 05/02/24	30	0	CB around T-S line	1,300	400	Standard	Exceedance
G401	UA	E005	Thallium, total	mg/L	11/21/15 - 05/02/24	26	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G401	UA	E005	Total Dissolved Solids	mg/L	11/21/15 - 05/02/24	30	0	CI around median	2,800	1,200	Standard	Exceedance
G402	UA	E005	Antimony, total	mg/L	11/21/15 - 05/06/24	26	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G402	UA	E005	Arsenic, total	mg/L	11/21/15 - 05/06/24	29	0	CB around linear reg	-0.00488	0.010	Standard	No Exceedance
G402	UA	E005	Barium, total	mg/L	11/21/15 - 05/06/24	29	0	CB around linear reg	-0.00122	2.0	Standard	No Exceedance
G402	UA	E005	Beryllium, total	mg/L	11/21/15 - 05/06/24	28	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G402	UA	E005	Boron, total	mg/L	11/21/15 - 05/06/24	30	0	CB around T-S line	4.52	2	Standard	Exceedance
G402	UA	E005	Cadmium, total	mg/L	11/21/15 - 05/06/24	29	97	Most recent sample	0.001	0.005	Standard	No Exceedance
G402	UA	E005	Chloride, total	mg/L	11/21/15 - 05/06/24	30	27	CI around mean	1.6	200	Standard	No Exceedance
G402	UA	E005	Chromium, total	mg/L	11/21/15 - 05/06/24	29	41	CB around T-S line	-0.00599	0.1	Standard	No Exceedance
G402	UA	E005	Cobalt, total	mg/L	11/21/15 - 05/06/24	29	21	CB around linear reg	-0.00286	0.006	Standard	No Exceedance
G402	UA	E005	Fluoride, total	mg/L	11/21/15 - 05/06/24	30	13	CI around median	0.295	4.0	Standard	No Exceedance
G402	UA	E005	Lead, total	mg/L	11/21/15 - 05/06/24	28	32	CB around linear reg	-0.00398	0.0120	Background	No Exceedance
G402	UA	E005	Lithium, total	mg/L	11/21/15 - 05/06/24	29	3	CB around linear reg	0.0115	0.04	Standard	No Exceedance
G402	UA	E005	Mercury, total	mg/L	11/21/15 - 05/06/24	28	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G402	UA	E005	Molybdenum, total	mg/L	11/21/15 - 05/06/24	29	0	CB around linear reg	0.00106	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G402	UA	E005	pH (field)	SU	11/21/15 - 05/06/24	30	0	CB around linear reg	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance
G402	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 05/06/24	29	0	CI around median	0.547	5	Standard	No Exceedance
G402	UA	E005	Selenium, total	mg/L	11/21/15 - 05/06/24	29	79	CB around T-S line	0.000644	0.05	Standard	No Exceedance
G402	UA	E005	Sulfate, total	mg/L	11/21/15 - 05/06/24	30	0	CB around T-S line	360	400	Standard	No Exceedance
G402	UA	E005	Thallium, total	mg/L	11/21/15 - 05/06/24	26	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G402	UA	E005	Total Dissolved Solids	mg/L	11/21/15 - 05/06/24	30	0	CB around linear reg	1,260	1,200	Standard	Exceedance
G403	UA	E005	Antimony, total	mg/L	11/23/15 - 05/06/24	26	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G403	UA	E005	Arsenic, total	mg/L	11/23/15 - 05/06/24	29	62	CB around T-S line	2.51e-05	0.010	Standard	No Exceedance
G403	UA	E005	Barium, total	mg/L	11/23/15 - 05/06/24	29	0	CB around T-S line	0.0755	2.0	Standard	No Exceedance
G403	UA	E005	Beryllium, total	mg/L	11/23/15 - 05/06/24	28	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G403	UA	E005	Boron, total	mg/L	11/23/15 - 05/06/24	30	20	CI around geomean	0.0154	2	Standard	No Exceedance
G403	UA	E005	Cadmium, total	mg/L	11/23/15 - 05/06/24	29	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G403	UA	E005	Chloride, total	mg/L	11/23/15 - 05/06/24	30	0	CB around linear reg	4.71	200	Standard	No Exceedance
G403	UA	E005	Chromium, total	mg/L	11/23/15 - 05/06/24	29	93	CB around T-S line	0.00245	0.1	Standard	No Exceedance
G403	UA	E005	Cobalt, total	mg/L	11/23/15 - 05/06/24	29	59	CI around median	0.002	0.006	Standard	No Exceedance
G403	UA	E005	Fluoride, total	mg/L	11/23/15 - 05/06/24	30	10	CB around T-S line	0.215	4.0	Standard	No Exceedance
G403	UA	E005	Lead, total	mg/L	11/23/15 - 05/06/24	28	89	CI around median	0.001	0.0120	Background	No Exceedance
G403	UA	E005	Lithium, total	mg/L	11/23/15 - 05/06/24	29	90	CI around median	0.01	0.04	Standard	No Exceedance
G403	UA	E005	Mercury, total	mg/L	11/23/15 - 05/06/24	28	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G403	UA	E005	Molybdenum, total	mg/L	11/23/15 - 05/06/24	29	76	CI around median	0.001	0.1	Standard	No Exceedance
G403	UA	E005	pH (field)	SU	11/23/15 - 05/06/24	30	0	CI around mean	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance
G403	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/23/15 - 05/06/24	29	0	CI around mean	0.607	5	Standard	No Exceedance
G403	UA	E005	Selenium, total	mg/L	11/23/15 - 05/06/24	29	97	CI around median	0.001	0.05	Standard	No Exceedance
G403	UA	E005	Sulfate, total	mg/L	11/23/15 - 05/06/24	30	0	CB around T-S line	61.7	400	Standard	No Exceedance
G403	UA	E005	Thallium, total	mg/L	11/23/15 - 05/06/24	26	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G403	UA	E005	Total Dissolved Solids	mg/L	11/23/15 - 05/06/24	30	0	CB around linear reg	398	1,200	Standard	No Exceedance
G404	UA	E005	Antimony, total	mg/L	11/21/15 - 05/06/24	26	96	CB around T-S line	0.00247	0.006	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G404	UA	E005	Arsenic, total	mg/L	11/21/15 - 05/06/24	29	87	CI around median	0.001	0.010	Standard	No Exceedance
G404	UA	E005	Barium, total	mg/L	11/21/15 - 05/06/24	29	0	CB around linear reg	0.0219	2.0	Standard	No Exceedance
G404	UA	E005	Beryllium, total	mg/L	11/21/15 - 05/06/24	28	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G404	UA	E005	Boron, total	mg/L	11/21/15 - 05/06/24	30	0	CB around linear reg	6.36	2	Standard	Exceedance
G404	UA	E005	Cadmium, total	mg/L	11/21/15 - 05/06/24	29	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G404	UA	E005	Chloride, total	mg/L	11/21/15 - 05/06/24	30	0	CB around linear reg	95.5	200	Standard	No Exceedance
G404	UA	E005	Chromium, total	mg/L	11/21/15 - 05/06/24	29	97	CB around T-S line	0.00335	0.1	Standard	No Exceedance
G404	UA	E005	Cobalt, total	mg/L	11/21/15 - 05/06/24	29	93	CI around median	0.002	0.006	Standard	No Exceedance
G404	UA	E005	Fluoride, total	mg/L	11/21/15 - 05/06/24	30	71	CB around T-S line	0.211	4.0	Standard	No Exceedance
G404	UA	E005	Lead, total	mg/L	11/21/15 - 05/06/24	28	97	CI around median	0.001	0.0120	Background	No Exceedance
G404	UA	E005	Lithium, total	mg/L	11/21/15 - 05/06/24	29	76	CI around median	0.01	0.04	Standard	No Exceedance
G404	UA	E005	Mercury, total	mg/L	11/21/15 - 05/06/24	28	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G404	UA	E005	Molybdenum, total	mg/L	11/21/15 - 05/06/24	29	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G404	UA	E005	pH (field)	SU	11/21/15 - 05/06/24	30	0	CB around linear reg	6.5/6.8	6.5/9.0	Standard/Standard	No Exceedance
G404	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 05/06/24	29	0	CI around mean	0.592	5	Standard	No Exceedance
G404	UA	E005	Selenium, total	mg/L	11/21/15 - 05/06/24	29	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G404	UA	E005	Sulfate, total	mg/L	11/21/15 - 05/06/24	30	0	CB around linear reg	426	400	Standard	Exceedance
G404	UA	E005	Thallium, total	mg/L	11/21/15 - 05/06/24	26	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G404	UA	E005	Total Dissolved Solids	mg/L	11/21/15 - 05/06/24	30	0	CB around linear reg	1,170	1,200	Standard	No Exceedance
G405	UA	E005	Antimony, total	mg/L	11/21/15 - 05/06/24	26	93	CB around T-S line	0.00233	0.006	Standard	No Exceedance
G405	UA	E005	Arsenic, total	mg/L	11/21/15 - 05/06/24	29	33	CB around T-S line	-0.00194	0.010	Standard	No Exceedance
G405	UA	E005	Barium, total	mg/L	11/21/15 - 05/06/24	29	0	CB around linear reg	0.00761	2.0	Standard	No Exceedance
G405	UA	E005	Beryllium, total	mg/L	11/21/15 - 05/06/24	28	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G405	UA	E005	Boron, total	mg/L	11/21/15 - 05/06/24	30	0	CI around mean	9.38	2	Standard	Exceedance
G405	UA	E005	Cadmium, total	mg/L	11/21/15 - 05/06/24	29	97	CI around median	0.001	0.005	Standard	No Exceedance
G405	UA	E005	Chloride, total	mg/L	11/21/15 - 05/06/24	30	0	CI around geomean	9.58	200	Standard	No Exceedance
G405	UA	E005	Chromium, total	mg/L	11/21/15 - 05/06/24	29	90	CB around T-S line	0.0033	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G405	UA	E005	Cobalt, total	mg/L	11/21/15 - 05/06/24	29	67	CB around T-S line	0.000972	0.006	Standard	No Exceedance
G405	UA	E005	Fluoride, total	mg/L	11/21/15 - 05/06/24	30	10	CB around linear reg	0.241	4.0	Standard	No Exceedance
G405	UA	E005	Lead, total	mg/L	11/21/15 - 05/06/24	28	52	CB around T-S line	-0.000825	0.0120	Background	No Exceedance
G405	UA	E005	Lithium, total	mg/L	11/21/15 - 05/06/24	29	90	CI around median	0.01	0.04	Standard	No Exceedance
G405	UA	E005	Mercury, total	mg/L	11/21/15 - 05/06/24	28	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G405	UA	E005	Molybdenum, total	mg/L	11/21/15 - 05/06/24	29	43	CI around median	0.001	0.1	Standard	No Exceedance
G405	UA	E005	pH (field)	SU	11/21/15 - 05/06/24	30	0	CI around mean	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance
G405	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 05/06/24	29	0	CI around median	0.541	5	Standard	No Exceedance
G405	UA	E005	Selenium, total	mg/L	11/21/15 - 05/06/24	29	90	CI around median	0.001	0.05	Standard	No Exceedance
G405	UA	E005	Sulfate, total	mg/L	11/21/15 - 05/06/24	30	0	CB around linear reg	474	400	Standard	Exceedance
G405	UA	E005	Thallium, total	mg/L	11/21/15 - 05/06/24	26	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G405	UA	E005	Total Dissolved Solids	mg/L	11/21/15 - 05/06/24	30	0	CI around mean	1,550	1,200	Standard	Exceedance
G406	UA	E005	Antimony, total	mg/L	10/14/20 - 05/06/24	15	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G406	UA	E005	Arsenic, total	mg/L	10/14/20 - 05/06/24	15	93	CI around median	0.001	0.010	Standard	No Exceedance
G406	UA	E005	Barium, total	mg/L	10/14/20 - 05/06/24	15	0	CI around median	0.0124	2.0	Standard	No Exceedance
G406	UA	E005	Beryllium, total	mg/L	10/14/20 - 05/06/24	15	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G406	UA	E005	Boron, total	mg/L	10/14/20 - 05/06/24	15	0	CI around median	1.4	2	Standard	No Exceedance
G406	UA	E005	Cadmium, total	mg/L	10/14/20 - 05/06/24	15	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G406	UA	E005	Chloride, total	mg/L	10/14/20 - 05/06/24	15	13	CI around mean	3.06	200	Standard	No Exceedance
G406	UA	E005	Chromium, total	mg/L	10/14/20 - 05/06/24	15	93	CB around T-S line	0.00081	0.1	Standard	No Exceedance
G406	UA	E005	Cobalt, total	mg/L	10/14/20 - 05/06/24	15	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G406	UA	E005	Fluoride, total	mg/L	10/14/20 - 05/06/24	15	13	CI around median	0.273	4.0	Standard	No Exceedance
G406	UA	E005	Lead, total	mg/L	10/14/20 - 05/06/24	15	93	CI around median	0.001	0.0120	Background	No Exceedance
G406	UA	E005	Lithium, total	mg/L	10/14/20 - 05/06/24	15	73	CB around T-S line	0.0107	0.04	Standard	No Exceedance
G406	UA	E005	Mercury, total	mg/L	10/14/20 - 05/06/24	15	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G406	UA	E005	Molybdenum, total	mg/L	10/14/20 - 05/06/24	15	93	CI around median	0.001	0.1	Standard	No Exceedance
G406	UA	E005	pH (field)	SU	10/14/20 - 05/06/24	15	0	CI around mean	6.5/6.7	6.5/9.0	Standard/Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G406	UA	E005	Radium 226 + Radium 228, total	pCi/L	10/14/20 - 05/06/24	15	0	CI around mean	0.272	5	Standard	No Exceedance
G406	UA	E005	Selenium, total	mg/L	10/14/20 - 05/06/24	15	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G406	UA	E005	Sulfate, total	mg/L	10/14/20 - 05/06/24	15	0	CI around median	450	400	Standard	Exceedance
G406	UA	E005	Thallium, total	mg/L	10/14/20 - 05/06/24	15	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G406	UA	E005	Total Dissolved Solids	mg/L	10/14/20 - 05/06/24	15	0	CI around mean	1,010	1,200	Standard	No Exceedance
G407	UA	E005	Antimony, total	mg/L	10/14/20 - 04/29/24	15	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G407	UA	E005	Arsenic, total	mg/L	10/14/20 - 04/29/24	15	87	CI around median	0.001	0.010	Standard	No Exceedance
G407	UA	E005	Barium, total	mg/L	10/14/20 - 04/29/24	15	0	CI around median	0.0118	2.0	Standard	No Exceedance
G407	UA	E005	Beryllium, total	mg/L	10/14/20 - 04/29/24	15	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G407	UA	E005	Boron, total	mg/L	10/14/20 - 04/29/24	15	0	CI around mean	0.0737	2	Standard	No Exceedance
G407	UA	E005	Cadmium, total	mg/L	10/14/20 - 04/29/24	15	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G407	UA	E005	Chloride, total	mg/L	10/14/20 - 04/29/24	15	0	CI around median	11	200	Standard	No Exceedance
G407	UA	E005	Chromium, total	mg/L	10/14/20 - 04/29/24	15	80	CI around median	0.0015	0.1	Standard	No Exceedance
G407	UA	E005	Cobalt, total	mg/L	10/14/20 - 04/29/24	15	87	CI around median	0.001	0.006	Standard	No Exceedance
G407	UA	E005	Fluoride, total	mg/L	10/14/20 - 04/29/24	15	20	CI around geomean	0.268	4.0	Standard	No Exceedance
G407	UA	E005	Lead, total	mg/L	10/14/20 - 04/29/24	15	93	CI around median	0.001	0.0120	Background	No Exceedance
G407	UA	E005	Lithium, total	mg/L	10/14/20 - 04/29/24	15	0	CI around median	0.038	0.04	Standard	No Exceedance
G407	UA	E005	Mercury, total	mg/L	10/14/20 - 04/29/24	15	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G407	UA	E005	Molybdenum, total	mg/L	10/14/20 - 04/29/24	15	20	CI around geomean	0.00107	0.1	Standard	No Exceedance
G407	UA	E005	pH (field)	SU	10/14/20 - 04/29/24	15	0	CI around mean	6.6/6.7	6.5/9.0	Standard/Standard	No Exceedance
G407	UA	E005	Radium 226 + Radium 228, total	pCi/L	10/14/20 - 04/29/24	15	0	CI around mean	0.276	5	Standard	No Exceedance
G407	UA	E005	Selenium, total	mg/L	10/14/20 - 04/29/24	15	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G407	UA	E005	Sulfate, total	mg/L	10/14/20 - 04/29/24	15	0	CI around median	830	400	Standard	Exceedance
G407	UA	E005	Thallium, total	mg/L	10/14/20 - 04/29/24	15	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G407	UA	E005	Total Dissolved Solids	mg/L	10/14/20 - 04/29/24	15	0	CI around mean	1,910	1,200	Standard	Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
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:

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
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G1001	LCU	E006	Antimony, total	mg/L	02/15/23 - 08/02/24	6	67	CI around median (Last Sample, n<7)	0.001	0.006	Standard	No Exceedance
G1001	LCU	E006	Arsenic, total	mg/L	02/15/23 - 08/02/24	6	67	CI around median (Last Sample, n<7)	0.001	0.010	Standard	No Exceedance
G1001	LCU	E006	Barium, total	mg/L	02/15/23 - 08/02/24	6	0	CI around mean	0.00719	2.0	Standard	No Exceedance
G1001	LCU	E006	Beryllium, total	mg/L	02/15/23 - 08/02/24	6	83	CI around median (Last Sample, n<7)	0.001	0.004	Standard	No Exceedance
G1001	LCU	E006	Boron, total	mg/L	05/12/21 - 08/02/24	7	0	CI around mean	0.75	2	Standard	No Exceedance
G1001	LCU	E006	Cadmium, total	mg/L	02/15/23 - 08/02/24	6	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G1001	LCU	E006	Chloride, total	mg/L	05/12/21 - 08/02/24	7	0	CI around mean	7.45	200	Standard	No Exceedance
G1001	LCU	E006	Chromium, total	mg/L	02/15/23 - 08/02/24	6	50	CI around geomean	0.000611	0.1	Standard	No Exceedance
G1001	LCU	E006	Cobalt, total	mg/L	05/12/21 - 08/02/24	7	71	CI around median	0.001	0.006	Standard	No Exceedance
G1001	LCU	E006	Fluoride, total	mg/L	02/15/23 - 08/02/24	6	50	CI around geomean	0.232	4.0	Standard	No Exceedance
G1001	LCU	E006	Lead, total	mg/L	02/15/23 - 08/02/24	6	67	CI around median (Last Sample, n<7)	0.001	0.0120	Background	No Exceedance
G1001	LCU	E006	Lithium, total	mg/L	05/12/21 - 08/02/24	7	14	CI around mean	0.00356	0.04	Standard	No Exceedance
G1001	LCU	E006	Mercury, total	mg/L	02/15/23 - 08/02/24	6	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G1001	LCU	E006	Molybdenum, total	mg/L	02/15/23 - 08/02/24	6	0	CI around mean	0.0033	0.1	Standard	No Exceedance
G1001	LCU	E006	pH (field)	SU	02/15/23 - 08/02/24	6	0	CI around median (Last Sample, n<7)	7.0/7.0	6.5/9.0	Standard/Standard	No Exceedance
G1001	LCU	E006	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 08/02/24	6	0	CI around geomean	0.348	5	Standard	No Exceedance
G1001	LCU	E006	Selenium, total	mg/L	02/15/23 - 08/02/24	6	83	CI around median (Last Sample, n<7)	0.001	0.05	Standard	No Exceedance
G1001	LCU	E006	Sulfate, total	mg/L	05/12/21 - 08/02/24	7	0	CI around mean	57.5	400	Standard	No Exceedance
G1001	LCU	E006	Thallium, total	mg/L	02/15/23 - 08/02/24	6	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G1001	LCU	E006	Total Dissolved Solids	mg/L	02/15/23 - 08/02/24	6	0	CI around mean	508	1,200	Standard	No Exceedance
G401	UA	E006	Antimony, total	mg/L	11/21/15 - 08/02/24	27	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G401	UA	E006	Arsenic, total	mg/L	11/21/15 - 08/02/24	30	50	CB around T-S line	-0.0162	0.010	Standard	No Exceedance
G401	UA	E006	Barium, total	mg/L	11/21/15 - 08/02/24	30	0	CB around T-S line	-0.165	2.0	Standard	No Exceedance
G401	UA	E006	Beryllium, total	mg/L	11/21/15 - 08/02/24	29	83	CI around median	0.001	0.004	Standard	No Exceedance
G401	UA	E006	Boron, total	mg/L	11/21/15 - 08/02/24	31	0	CI around median	3.6	2	Standard	Exceedance
G401	UA	E006	Cadmium, total	mg/L	11/21/15 - 08/02/24	30	70	CB around T-S line	-0.00164	0.005	Standard	No Exceedance
G401	UA	E006	Chloride, total	mg/L	11/21/15 - 08/02/24	31	13	CI around geomean	2.94	200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G401	UA	E006	Chromium, total	mg/L	11/21/15 - 08/02/24	30	70	CB around T-S line	-0.0351	0.1	Standard	No Exceedance
G401	UA	E006	Cobalt, total	mg/L	11/21/15 - 08/02/24	30	0	CB around linear reg	0.0593	0.006	Standard	Exceedance
G401	UA	E006	Fluoride, total	mg/L	11/21/15 - 08/02/24	31	84	CB around T-S line	0.25	4.0	Standard	No Exceedance
G401	UA	E006	Lead, total	mg/L	11/21/15 - 08/02/24	29	69	CB around T-S line	-0.0245	0.0120	Background	No Exceedance
G401	UA	E006	Lithium, total	mg/L	11/21/15 - 08/02/24	32	3	CB around T-S line	-0.00457	0.04	Standard	No Exceedance
G401	UA	E006	Mercury, total	mg/L	11/21/15 - 08/02/24	29	83	CI around median	0.0002	0.002	Standard	No Exceedance
G401	UA	E006	Molybdenum, total	mg/L	11/21/15 - 08/02/24	30	73	CI around median	0.001	0.1	Standard	No Exceedance
G401	UA	E006	pH (field)	SU	11/21/15 - 08/02/24	33	0	CI around mean	5.9/6.1	6.5/9.0	Standard/Standard	Exceedance
G401	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 08/02/24	30	0	CB around T-S line	-0.0718	5	Standard	No Exceedance
G401	UA	E006	Selenium, total	mg/L	11/21/15 - 08/02/24	30	67	CB around T-S line	-0.00151	0.05	Standard	No Exceedance
G401	UA	E006	Sulfate, total	mg/L	11/21/15 - 08/02/24	31	0	CB around T-S line	1,330	400	Standard	Exceedance
G401	UA	E006	Thallium, total	mg/L	11/21/15 - 08/02/24	27	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G401	UA	E006	Total Dissolved Solids	mg/L	11/21/15 - 08/02/24	31	0	CI around median	2,800	1,200	Standard	Exceedance
G402	UA	E006	Antimony, total	mg/L	11/21/15 - 08/01/24	27	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G402	UA	E006	Arsenic, total	mg/L	11/21/15 - 08/01/24	30	0	CB around linear reg	-0.00482	0.010	Standard	No Exceedance
G402	UA	E006	Barium, total	mg/L	11/21/15 - 08/01/24	30	0	CB around linear reg	-0.000928	2.0	Standard	No Exceedance
G402	UA	E006	Beryllium, total	mg/L	11/21/15 - 08/01/24	29	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G402	UA	E006	Boron, total	mg/L	11/21/15 - 08/01/24	31	0	CB around T-S line	4.41	2	Standard	Exceedance
G402	UA	E006	Cadmium, total	mg/L	11/21/15 - 08/01/24	30	97	Most recent sample	0.001	0.005	Standard	No Exceedance
G402	UA	E006	Chloride, total	mg/L	11/21/15 - 08/01/24	31	29	CI around mean	1.61	200	Standard	No Exceedance
G402	UA	E006	Chromium, total	mg/L	11/21/15 - 08/01/24	30	40	CB around T-S line	-0.00516	0.1	Standard	No Exceedance
G402	UA	E006	Cobalt, total	mg/L	11/21/15 - 08/01/24	30	20	CB around linear reg	-0.00286	0.006	Standard	No Exceedance
G402	UA	E006	Fluoride, total	mg/L	11/21/15 - 08/01/24	31	16	CI around geomean	0.294	4.0	Standard	No Exceedance
G402	UA	E006	Lead, total	mg/L	11/21/15 - 08/01/24	29	31	CB around linear reg	-0.00392	0.0120	Background	No Exceedance
G402	UA	E006	Lithium, total	mg/L	11/21/15 - 08/01/24	30	3	CB around linear reg	0.0116	0.04	Standard	No Exceedance
G402	UA	E006	Mercury, total	mg/L	11/21/15 - 08/01/24	29	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G402	UA	E006	Molybdenum, total	mg/L	11/21/15 - 08/01/24	30	0	CB around linear reg	0.00103	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G402	UA	E006	pH (field)	SU	11/21/15 - 08/01/24	31	0	CB around linear reg	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance
G402	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 08/01/24	30	0	CI around median	0.547	5	Standard	No Exceedance
G402	UA	E006	Selenium, total	mg/L	11/21/15 - 08/01/24	30	80	CB around T-S line	0.000668	0.05	Standard	No Exceedance
G402	UA	E006	Sulfate, total	mg/L	11/21/15 - 08/01/24	31	0	CB around T-S line	330	400	Standard	No Exceedance
G402	UA	E006	Thallium, total	mg/L	11/21/15 - 08/01/24	27	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G402	UA	E006	Total Dissolved Solids	mg/L	11/21/15 - 08/01/24	31	0	CB around linear reg	1,260	1,200	Standard	Exceedance
G403	UA	E006	Antimony, total	mg/L	11/23/15 - 08/01/24	27	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G403	UA	E006	Arsenic, total	mg/L	11/23/15 - 08/01/24	30	63	CB around T-S line	0.000155	0.010	Standard	No Exceedance
G403	UA	E006	Barium, total	mg/L	11/23/15 - 08/01/24	30	0	CB around T-S line	0.0841	2.0	Standard	No Exceedance
G403	UA	E006	Beryllium, total	mg/L	11/23/15 - 08/01/24	29	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G403	UA	E006	Boron, total	mg/L	11/23/15 - 08/01/24	31	19	CI around geomean	0.0157	2	Standard	No Exceedance
G403	UA	E006	Cadmium, total	mg/L	11/23/15 - 08/01/24	30	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G403	UA	E006	Chloride, total	mg/L	11/23/15 - 08/01/24	31	0	CB around linear reg	4.83	200	Standard	No Exceedance
G403	UA	E006	Chromium, total	mg/L	11/23/15 - 08/01/24	30	93	CB around T-S line	0.00193	0.1	Standard	No Exceedance
G403	UA	E006	Cobalt, total	mg/L	11/23/15 - 08/01/24	30	60	CI around median	0.002	0.006	Standard	No Exceedance
G403	UA	E006	Fluoride, total	mg/L	11/23/15 - 08/01/24	31	13	CB around T-S line	0.21	4.0	Standard	No Exceedance
G403	UA	E006	Lead, total	mg/L	11/23/15 - 08/01/24	29	90	CI around median	0.001	0.0120	Background	No Exceedance
G403	UA	E006	Lithium, total	mg/L	11/23/15 - 08/01/24	30	87	CI around median	0.01	0.04	Standard	No Exceedance
G403	UA	E006	Mercury, total	mg/L	11/23/15 - 08/01/24	29	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G403	UA	E006	Molybdenum, total	mg/L	11/23/15 - 08/01/24	30	77	CI around median	0.001	0.1	Standard	No Exceedance
G403	UA	E006	pH (field)	SU	11/23/15 - 08/01/24	31	0	CI around mean	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance
G403	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/23/15 - 08/01/24	30	0	CI around mean	0.604	5	Standard	No Exceedance
G403	UA	E006	Selenium, total	mg/L	11/23/15 - 08/01/24	30	97	CI around median	0.001	0.05	Standard	No Exceedance
G403	UA	E006	Sulfate, total	mg/L	11/23/15 - 08/01/24	31	0	CB around T-S line	63.1	400	Standard	No Exceedance
G403	UA	E006	Thallium, total	mg/L	11/23/15 - 08/01/24	27	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G403	UA	E006	Total Dissolved Solids	mg/L	11/23/15 - 08/01/24	31	0	CB around linear reg	403	1,200	Standard	No Exceedance
G404	UA	E006	Antimony, total	mg/L	11/21/15 - 07/31/24	27	96	CB around T-S line	0.00233	0.006	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G404	UA	E006	Arsenic, total	mg/L	11/21/15 - 07/31/24	30	87	CI around median	0.001	0.010	Standard	No Exceedance
G404	UA	E006	Barium, total	mg/L	11/21/15 - 07/31/24	30	0	CB around linear reg	0.0226	2.0	Standard	No Exceedance
G404	UA	E006	Beryllium, total	mg/L	11/21/15 - 07/31/24	29	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G404	UA	E006	Boron, total	mg/L	11/21/15 - 07/31/24	31	0	CB around T-S line	4.32	2	Standard	Exceedance
G404	UA	E006	Cadmium, total	mg/L	11/21/15 - 07/31/24	30	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G404	UA	E006	Chloride, total	mg/L	11/21/15 - 07/31/24	31	0	CI around median	64	200	Standard	No Exceedance
G404	UA	E006	Chromium, total	mg/L	11/21/15 - 07/31/24	30	97	CB around T-S line	0.00338	0.1	Standard	No Exceedance
G404	UA	E006	Cobalt, total	mg/L	11/21/15 - 07/31/24	30	94	CI around median	0.002	0.006	Standard	No Exceedance
G404	UA	E006	Fluoride, total	mg/L	11/21/15 - 07/31/24	31	72	CI around median	0.25	4.0	Standard	No Exceedance
G404	UA	E006	Lead, total	mg/L	11/21/15 - 07/31/24	29	97	CI around median	0.001	0.0120	Background	No Exceedance
G404	UA	E006	Lithium, total	mg/L	11/21/15 - 07/31/24	30	73	CI around median	0.01	0.04	Standard	No Exceedance
G404	UA	E006	Mercury, total	mg/L	11/21/15 - 07/31/24	29	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G404	UA	E006	Molybdenum, total	mg/L	11/21/15 - 07/31/24	30	97	CB around T-S line	0.001	0.1	Standard	No Exceedance
G404	UA	E006	pH (field)	SU	11/21/15 - 07/31/24	31	0	CB around linear reg	6.5/6.8	6.5/9.0	Standard/Standard	No Exceedance
G404	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 07/31/24	30	0	CI around mean	0.587	5	Standard	No Exceedance
G404	UA	E006	Selenium, total	mg/L	11/21/15 - 07/31/24	30	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G404	UA	E006	Sulfate, total	mg/L	11/21/15 - 07/31/24	31	0	CB around linear reg	414	400	Standard	Exceedance
G404	UA	E006	Thallium, total	mg/L	11/21/15 - 07/31/24	27	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G404	UA	E006	Total Dissolved Solids	mg/L	11/21/15 - 07/31/24	31	0	CB around linear reg	1,140	1,200	Standard	No Exceedance
G405	UA	E006	Antimony, total	mg/L	11/21/15 - 07/31/24	27	93	CB around T-S line	0.00218	0.006	Standard	No Exceedance
G405	UA	E006	Arsenic, total	mg/L	11/21/15 - 07/31/24	30	36	CB around T-S line	-0.00184	0.010	Standard	No Exceedance
G405	UA	E006	Barium, total	mg/L	11/21/15 - 07/31/24	30	0	CB around linear reg	0.0074	2.0	Standard	No Exceedance
G405	UA	E006	Beryllium, total	mg/L	11/21/15 - 07/31/24	29	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G405	UA	E006	Boron, total	mg/L	11/21/15 - 07/31/24	31	0	CI around mean	9.4	2	Standard	Exceedance
G405	UA	E006	Cadmium, total	mg/L	11/21/15 - 07/31/24	30	97	CI around median	0.001	0.005	Standard	No Exceedance
G405	UA	E006	Chloride, total	mg/L	11/21/15 - 07/31/24	31	0	CI around geomean	9.81	200	Standard	No Exceedance
G405	UA	E006	Chromium, total	mg/L	11/21/15 - 07/31/24	30	90	CB around T-S line	0.00302	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G405	UA	E006	Cobalt, total	mg/L	11/21/15 - 07/31/24	30	68	CB around T-S line	0.000991	0.006	Standard	No Exceedance
G405	UA	E006	Fluoride, total	mg/L	11/21/15 - 07/31/24	31	12	CB around linear reg	0.228	4.0	Standard	No Exceedance
G405	UA	E006	Lead, total	mg/L	11/21/15 - 07/31/24	29	53	CB around T-S line	-0.00037	0.0120	Background	No Exceedance
G405	UA	E006	Lithium, total	mg/L	11/21/15 - 07/31/24	30	87	CI around median	0.01	0.04	Standard	No Exceedance
G405	UA	E006	Mercury, total	mg/L	11/21/15 - 07/31/24	29	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G405	UA	E006	Molybdenum, total	mg/L	11/21/15 - 07/31/24	30	45	CI around median	0.001	0.1	Standard	No Exceedance
G405	UA	E006	pH (field)	SU	11/21/15 - 07/31/24	31	0	CI around mean	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance
G405	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 07/31/24	30	0	CI around median	0.541	5	Standard	No Exceedance
G405	UA	E006	Selenium, total	mg/L	11/21/15 - 07/31/24	30	90	CI around median	0.001	0.05	Standard	No Exceedance
G405	UA	E006	Sulfate, total	mg/L	11/21/15 - 07/31/24	31	0	CB around linear reg	488	400	Standard	Exceedance
G405	UA	E006	Thallium, total	mg/L	11/21/15 - 07/31/24	27	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G405	UA	E006	Total Dissolved Solids	mg/L	11/21/15 - 07/31/24	31	0	CI around mean	1,550	1,200	Standard	Exceedance
G406	UA	E006	Antimony, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G406	UA	E006	Arsenic, total	mg/L	10/14/20 - 08/01/24	16	94	CI around median	0.001	0.010	Standard	No Exceedance
G406	UA	E006	Barium, total	mg/L	10/14/20 - 08/01/24	16	0	CI around median	0.0128	2.0	Standard	No Exceedance
G406	UA	E006	Beryllium, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G406	UA	E006	Boron, total	mg/L	10/14/20 - 08/01/24	16	0	CI around median	1.4	2	Standard	No Exceedance
G406	UA	E006	Cadmium, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G406	UA	E006	Chloride, total	mg/L	10/14/20 - 08/01/24	16	12	CI around mean	3.12	200	Standard	No Exceedance
G406	UA	E006	Chromium, total	mg/L	10/14/20 - 08/01/24	16	94	CB around T-S line	0.000569	0.1	Standard	No Exceedance
G406	UA	E006	Cobalt, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G406	UA	E006	Fluoride, total	mg/L	10/14/20 - 08/01/24	16	19	CI around geomean	0.279	4.0	Standard	No Exceedance
G406	UA	E006	Lead, total	mg/L	10/14/20 - 08/01/24	16	94	CI around median	0.001	0.0120	Background	No Exceedance
G406	UA	E006	Lithium, total	mg/L	10/14/20 - 08/01/24	16	69	CB around T-S line	0.00783	0.04	Standard	No Exceedance
G406	UA	E006	Mercury, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G406	UA	E006	Molybdenum, total	mg/L	10/14/20 - 08/01/24	16	94	CI around median	0.001	0.1	Standard	No Exceedance
G406	UA	E006	pH (field)	SU	10/14/20 - 08/01/24	16	0	CI around mean	6.5/6.7	6.5/9.0	Standard/Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G406	UA	E006	Radium 226 + Radium 228, total	pCi/L	10/14/20 - 08/01/24	16	0	CI around mean	0.302	5	Standard	No Exceedance
G406	UA	E006	Selenium, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G406	UA	E006	Sulfate, total	mg/L	10/14/20 - 08/01/24	16	0	CI around median	470	400	Standard	Exceedance
G406	UA	E006	Thallium, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G406	UA	E006	Total Dissolved Solids	mg/L	10/14/20 - 08/01/24	16	0	CI around mean	1,020	1,200	Standard	No Exceedance
G407	UA	E006	Antimony, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G407	UA	E006	Arsenic, total	mg/L	10/14/20 - 08/01/24	16	88	CI around median	0.001	0.010	Standard	No Exceedance
G407	UA	E006	Barium, total	mg/L	10/14/20 - 08/01/24	16	0	CI around median	0.012	2.0	Standard	No Exceedance
G407	UA	E006	Beryllium, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G407	UA	E006	Boron, total	mg/L	10/14/20 - 08/01/24	16	0	CI around mean	0.0741	2	Standard	No Exceedance
G407	UA	E006	Cadmium, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G407	UA	E006	Chloride, total	mg/L	10/14/20 - 08/01/24	16	0	CI around median	11	200	Standard	No Exceedance
G407	UA	E006	Chromium, total	mg/L	10/14/20 - 08/01/24	16	75	CI around median	0.0016	0.1	Standard	No Exceedance
G407	UA	E006	Cobalt, total	mg/L	10/14/20 - 08/01/24	16	88	CB around T-S line	0.000295	0.006	Standard	No Exceedance
G407	UA	E006	Fluoride, total	mg/L	10/14/20 - 08/01/24	16	25	CI around median	0.272	4.0	Standard	No Exceedance
G407	UA	E006	Lead, total	mg/L	10/14/20 - 08/01/24	16	94	CI around median	0.001	0.0120	Background	No Exceedance
G407	UA	E006	Lithium, total	mg/L	10/14/20 - 08/01/24	16	0	CI around median	0.038	0.04	Standard	No Exceedance
G407	UA	E006	Mercury, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G407	UA	E006	Molybdenum, total	mg/L	10/14/20 - 08/01/24	16	19	CI around geomean	0.00108	0.1	Standard	No Exceedance
G407	UA	E006	pH (field)	SU	10/14/20 - 08/01/24	16	0	CI around mean	6.6/6.7	6.5/9.0	Standard/Standard	No Exceedance
G407	UA	E006	Radium 226 + Radium 228, total	pCi/L	10/14/20 - 08/01/24	16	0	CI around geomean	0.239	5	Standard	No Exceedance
G407	UA	E006	Selenium, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G407	UA	E006	Sulfate, total	mg/L	10/14/20 - 08/01/24	16	0	CI around median	950	400	Standard	Exceedance
G407	UA	E006	Thallium, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G407	UA	E006	Total Dissolved Solids	mg/L	10/14/20 - 08/01/24	16	0	CI around mean	1,900	1,200	Standard	Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
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:

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

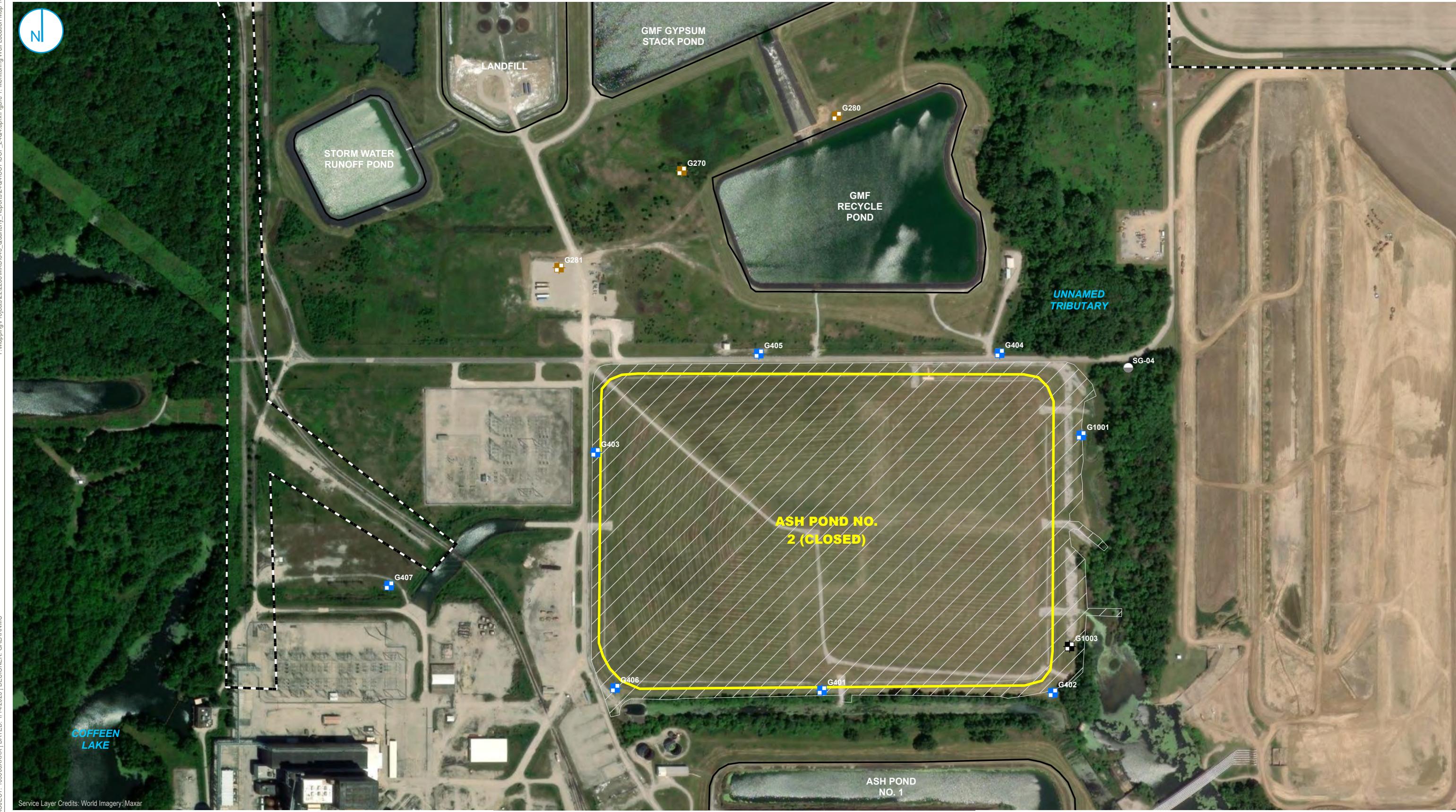
GWPS = Groundwater Protection Standard

GWPS Source:

Background = background concentration

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

FIGURES



Service Layer Credits: World Imagery: Maxar

- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING
- WELL
- MONITORING WELL
- CLOSED STAFF GAGE

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

NOTE: SG-04 WAS DESTROYED.

0 200 400 Feet

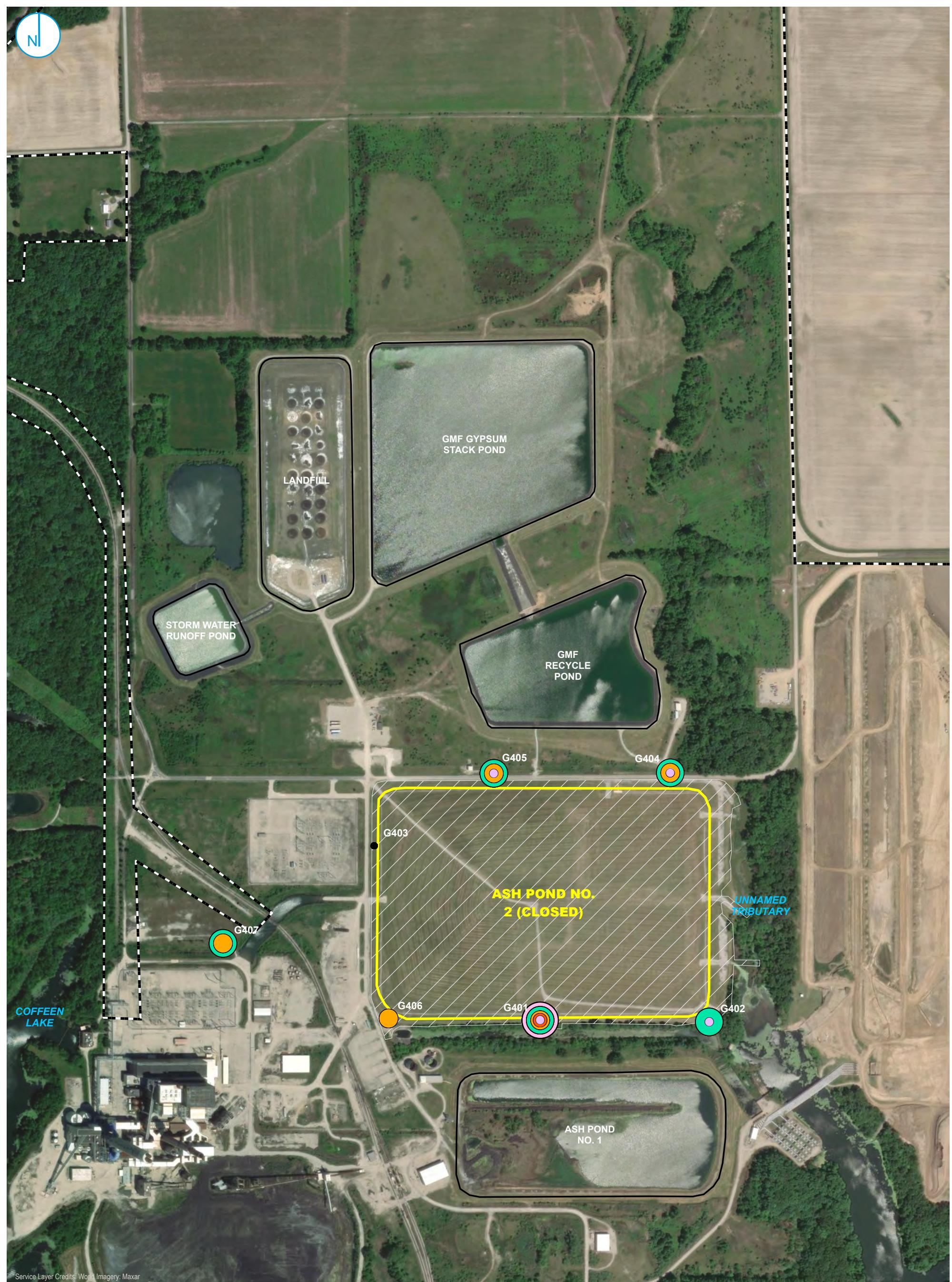
MONITORING WELL LOCATION MAP

ASH POND NO. 2
COFFEE POWER PLANT
COFFEEN, ILLINOIS

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL



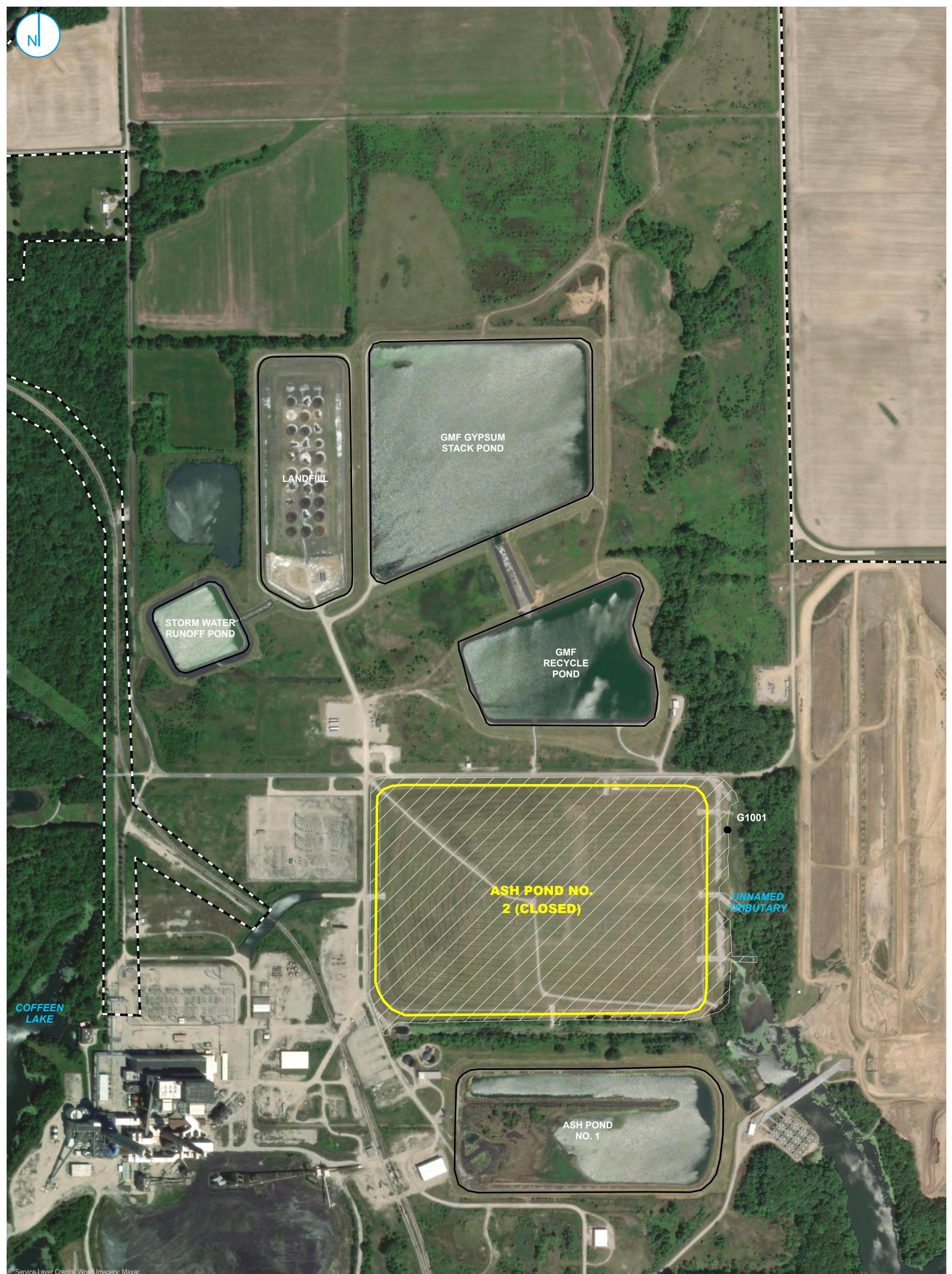
**GWPS EXCEEDANCE MAP
UPPERMOST AQUIFER
QUARTER 4, 2023 AND QUARTERS 1-3, 2024**

FIGURE 2

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
ASH POND NO. 2
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL



- COMPLIANCE WELL WITHOUT EXCEEDANCE
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- ▨ LIMITS OF FINAL COVER
- - PROPERTY BOUNDARY

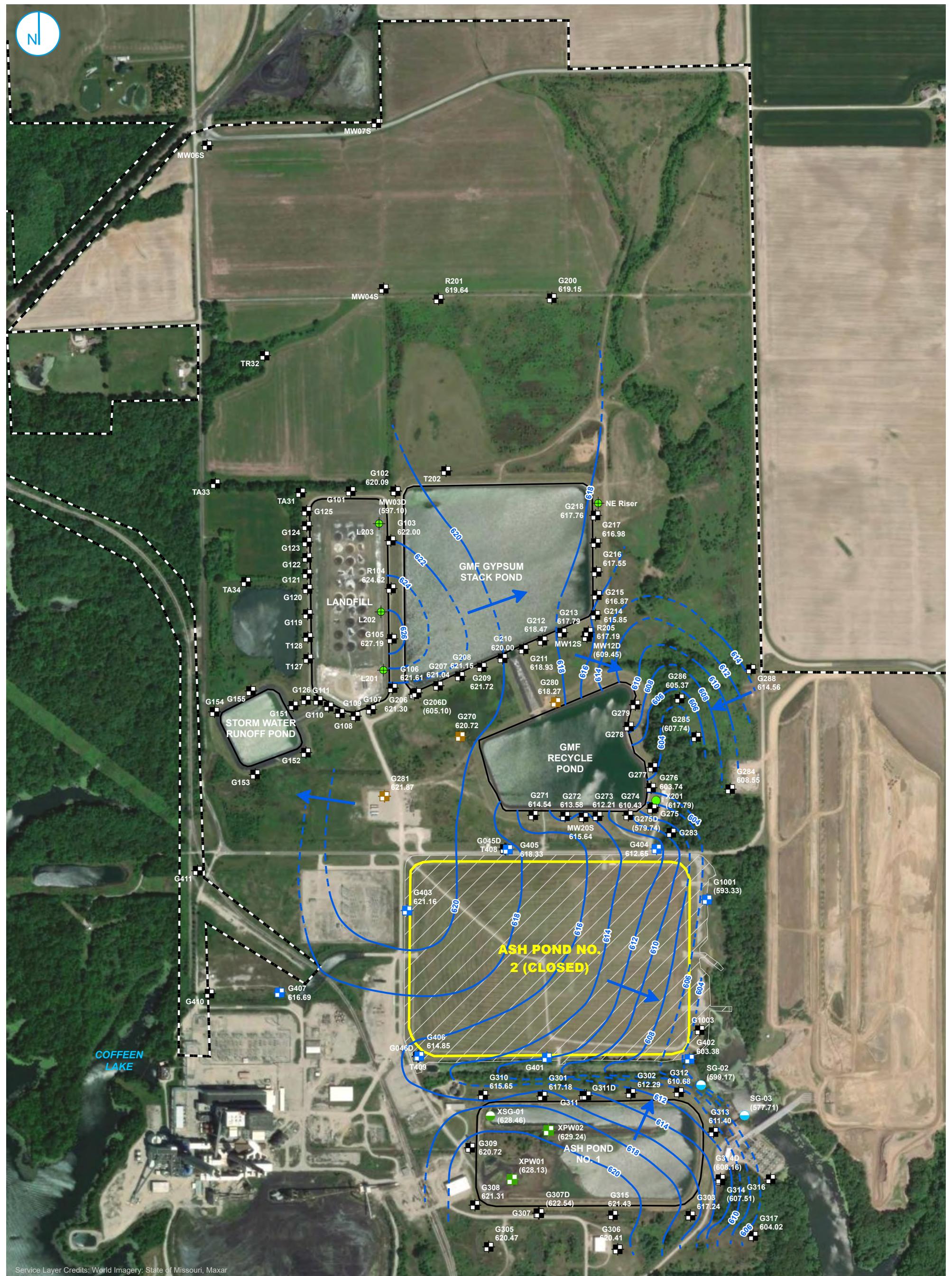
GWPS EXCEEDANCE MAP LOWER CONFINING UNIT QUARTER 4, 2023 AND QUARTERS 1-3, 2024

FIGURE 3

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
ASH POND NO. 2
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL



- The legend consists of two columns. The left column lists symbols: a blue square for Compliance Monitoring Well, a brown square for Background Monitoring Well, a black square with a white cross for Monitoring Well, a green square with a white cross for Pore Water Well, a solid green circle for CCR Sourcewater Sample, a green circle with a black dot for Staff Gage, CCR Unit, and a blue circle with a black dot for Staff Gage, River. The right column lists line styles: a solid blue line for Groundwater Elevation Contour (2-ft interval, NAVD88), a dashed blue line for Inferred Groundwater Elevation Contour, a blue arrow pointing right for Groundwater Flow Direction, a yellow box for Regulated Unit (Subject Unit), and a black box with a dashed bottom for Site Feature. A black dashed line at the bottom represents the Property Boundary.

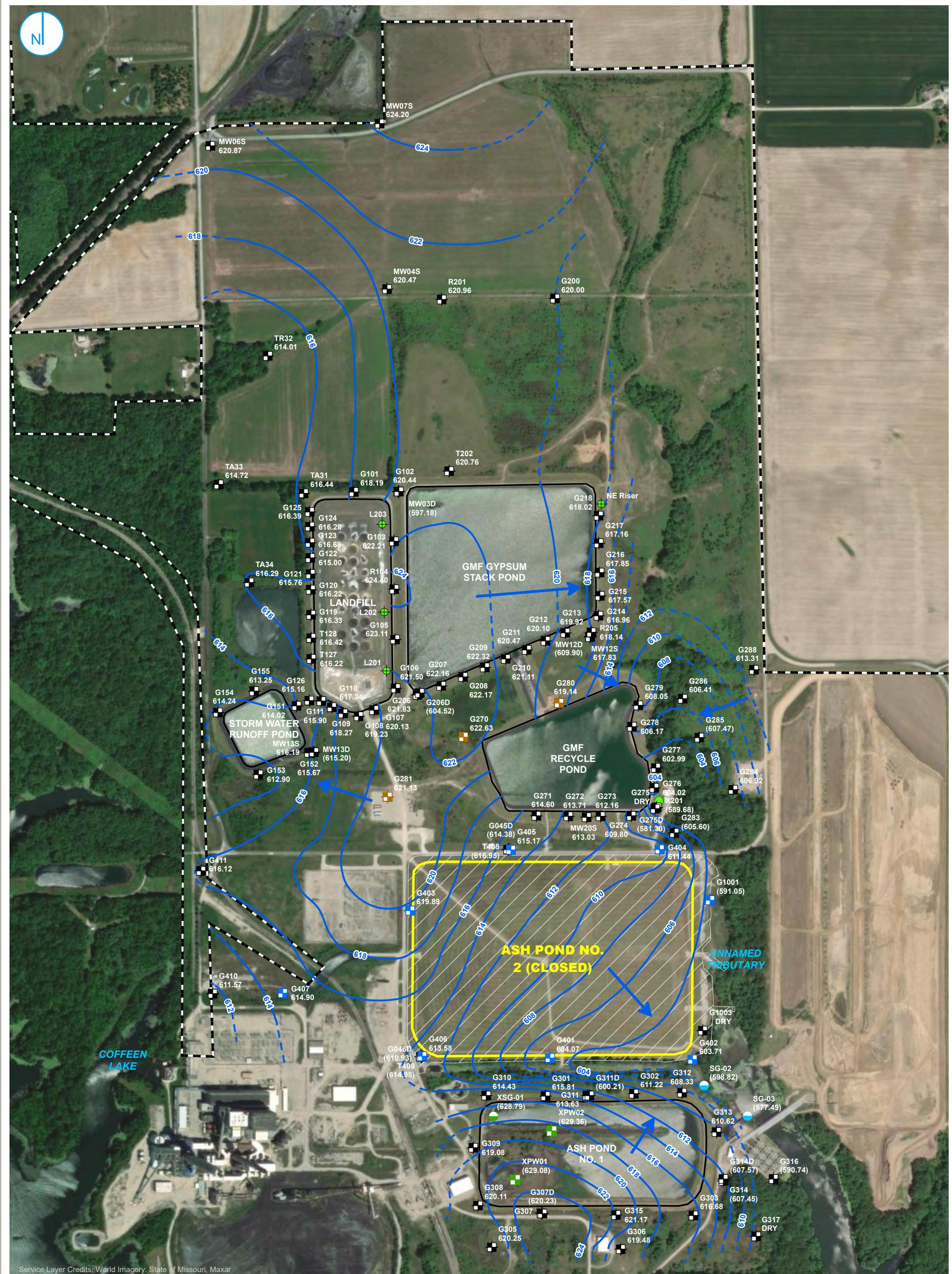
POTENTIOMETRIC SURFACE MAP
JANUARY 12, 2024

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ASH POND NO. 2

COFFEEN POWER PLANT

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

POTENTIOMETRIC SURFACE MAP
FEBRUARY 12 AND 13, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT

ASH POND NO. 2
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

FIGURE 5

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

NOTES:

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

0 325 650 Feet



- 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
 - L PROPERTY BOUNDARY

POTENSIOMETRIC SURFACE MAP

MARCH 29, 2024

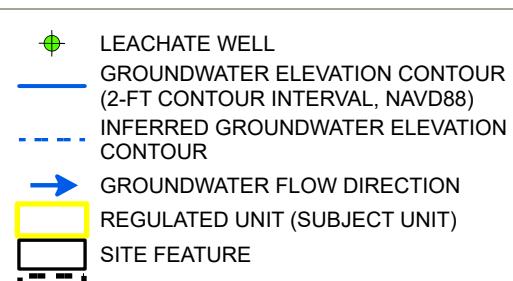
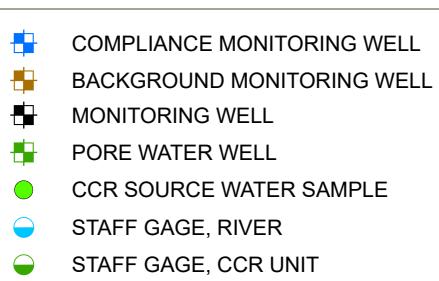
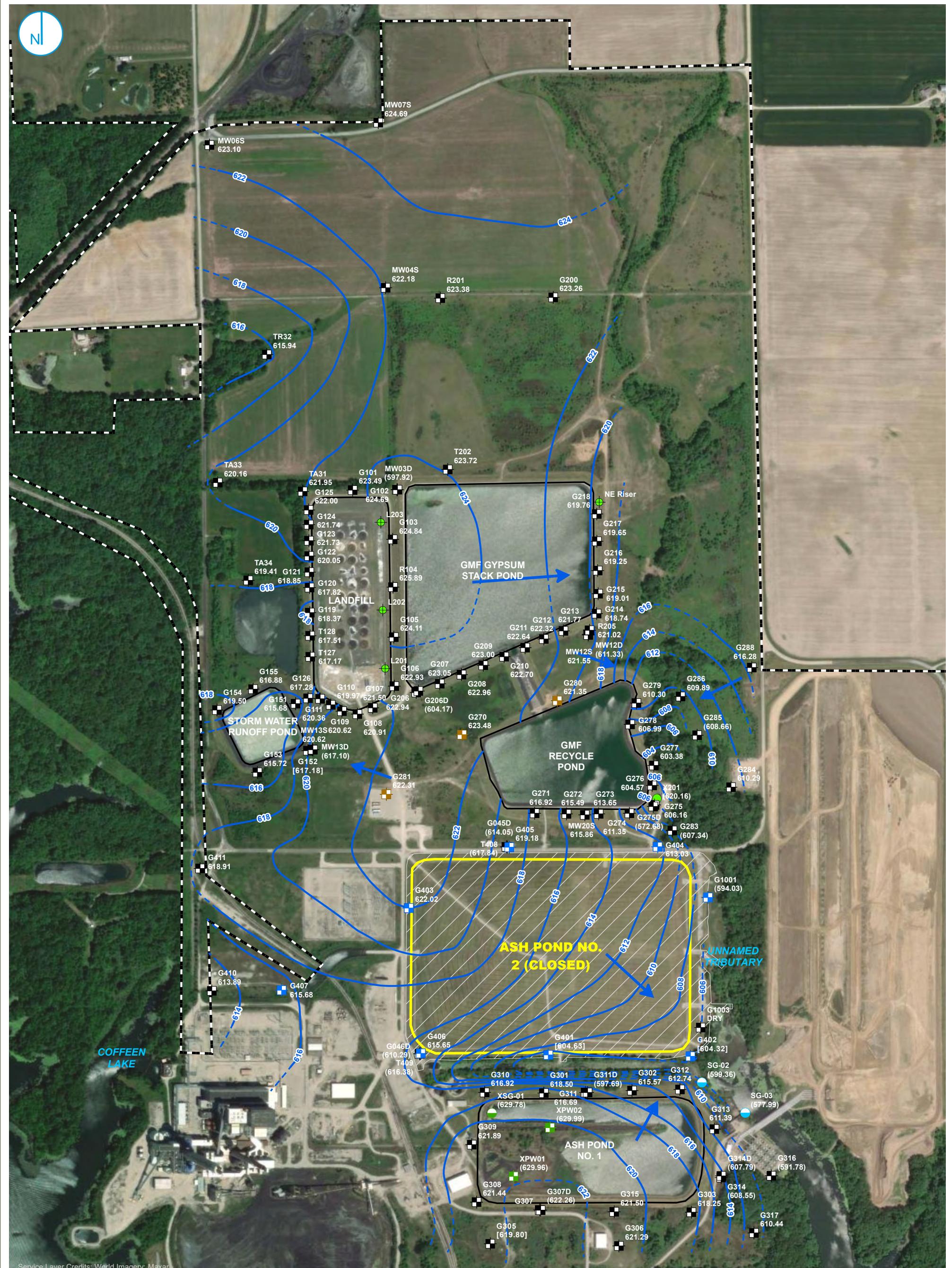
2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ASH POND NO. 2

COFFEEN POWER PLANT

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL



POTENTIOMETRIC SURFACE MAP
APRIL 29, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT

ASH POND NO. 2
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

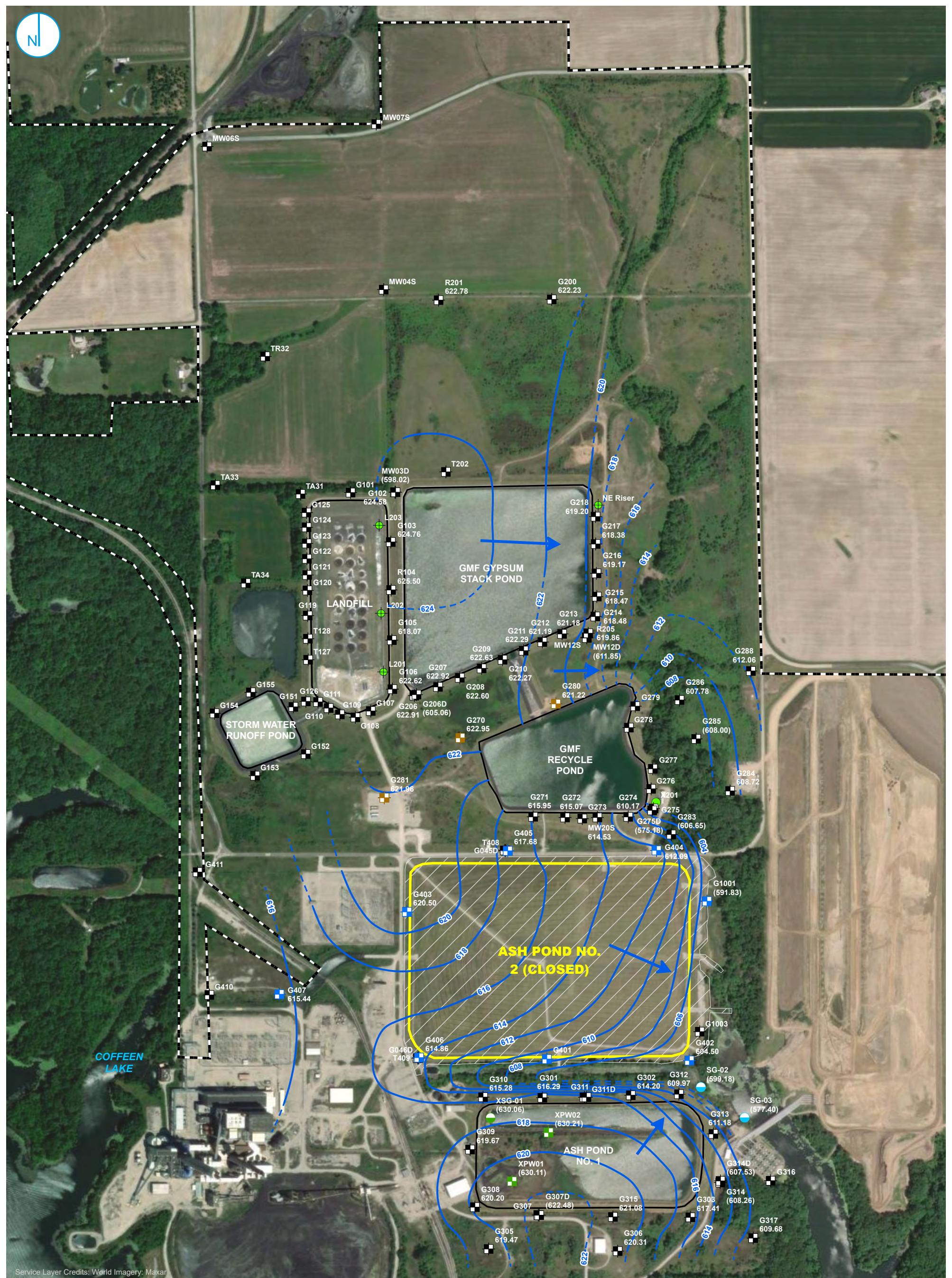
FIGURE 7

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



NOTES:

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



- 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)
 - - - INFERRRED GROUNDWATER ELEVATION
CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - █ REGULATED UNIT (SUBJECT UNIT)
 - █ SITE FEATURE
 - / \ LIMITS OF FINAL COVER
 - ██████ PROPERTY BOUNDARY

POTENTIOMETRIC SURFACE MAP
MAY 29, 2024

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ASH POND NO. 2

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)
 - - - INFERRRED GROUNDWATER ELEVATION
CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - REGULATED UNIT (SUBJECT UNIT)
 - SITE FEATURE
 - / \ LIMITS OF FINAL COVER
 - [] PROPERTY BOUNDARY

POTENSIOMETRIC SURFACE MAP
JUNE 29, 2024

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ASH POND NO. 2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

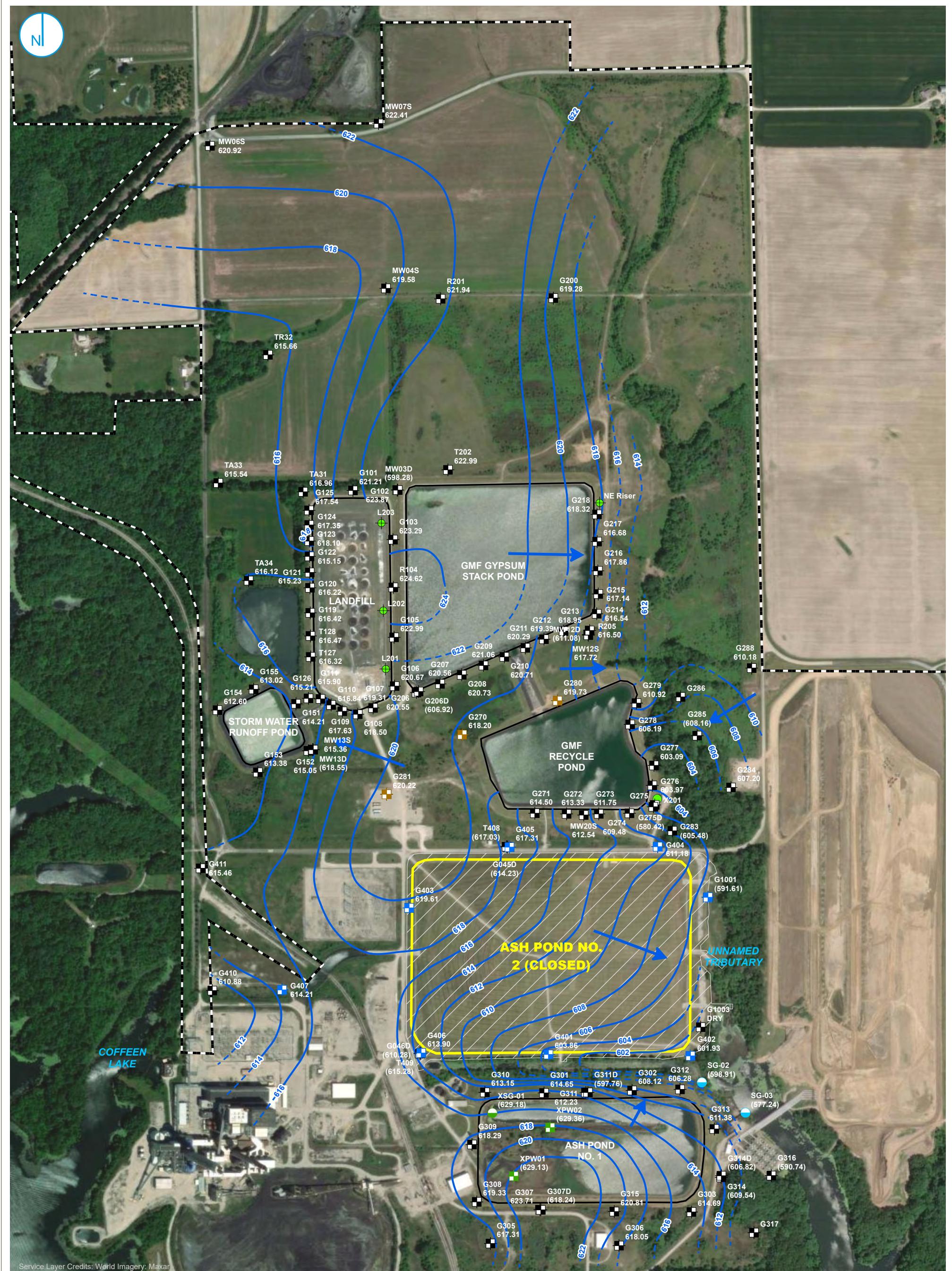
RAMBOLL

NOTES

NOTES:

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

A horizontal number line starting at 0 and ending at 650. There is a tick mark halfway between 0 and 650, labeled 325. The word "Feet" is written at the right end of the line.



- The legend is divided into two columns. The left column lists symbols for various monitoring wells and water samples. The right column lists line styles for groundwater contours, inferred elevations, flow direction, regulated units, site features, final cover limits, and property boundaries.

■	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)
- - -	INFERRRED GROUNDWATER ELEVATION CONTOUR
→	GROUNDWATER FLOW DIRECTION
■	REGULATED UNIT (SUBJECT UNIT)
■	SITE FEATURE
■	LIMITS OF FINAL COVER
■	PROPERTY BOUNDARY

POTENSIOMETRIC SURFACE MAP
JULY 29 AND 30, 2024

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



**POTENIOMETRIC SURFACE MAP
AUGUST 28, 2024**

**2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT**

ASH POND NO. 2
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

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).

FIGURE 11



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

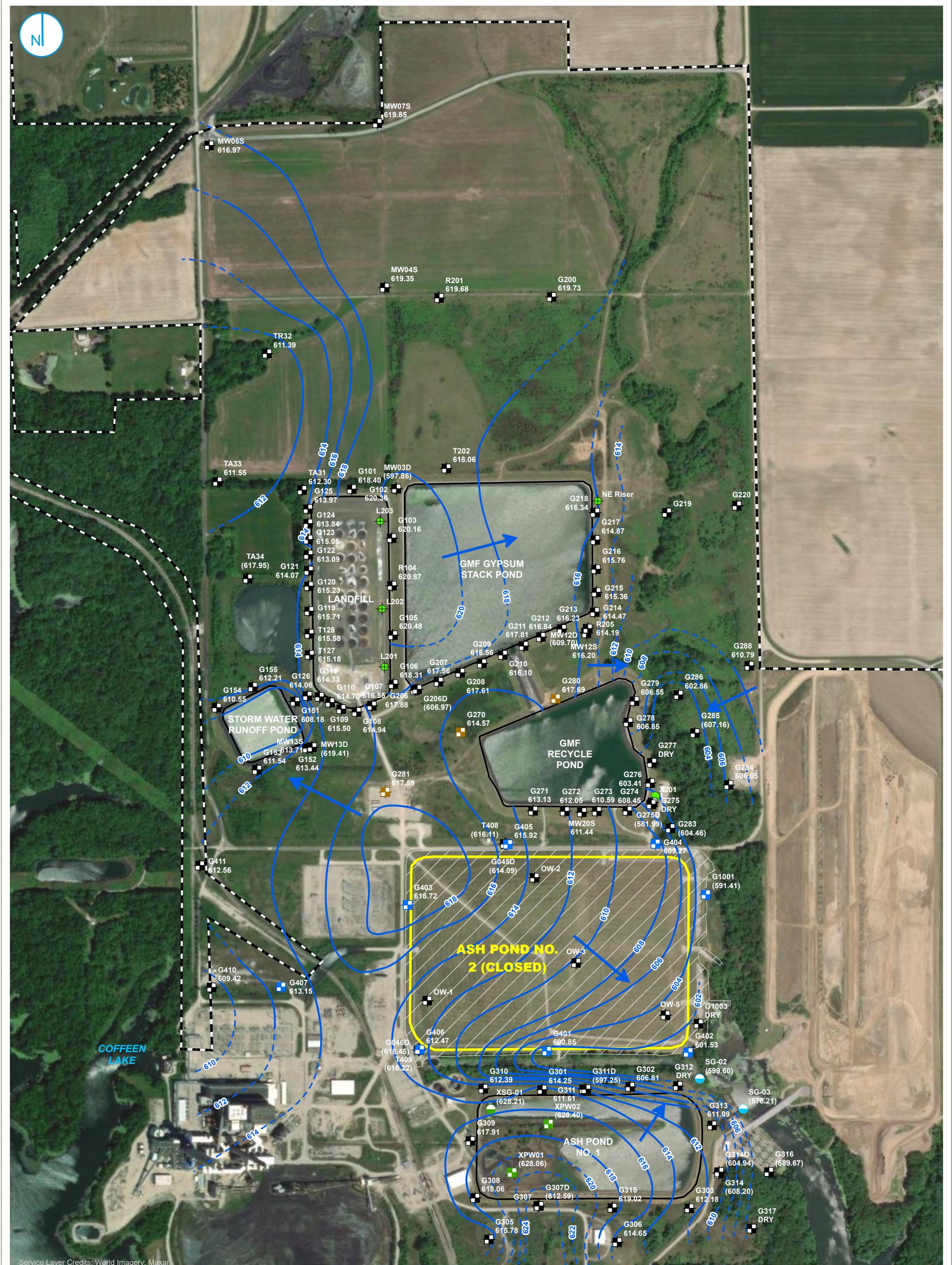
- GROUNDWATER ELEVATION CONTOUR
(2-FT CONTOUR INTERVAL, NAVD88)
 - - - INFERRRED GROUNDWATER ELEVATION CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - REGULATED UNIT (SUBJECT UNIT)
 - SITE FEATURE
 - LIMITS OF FINAL COVER
 - PROPERTY BOUNDARY

POTENTIOMETRIC SURFACE MAP
SEPTEMBER 28, 2024

**2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT**

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL



- The legend is organized into two columns. The left column lists symbols with their corresponding labels: a blue square for 'COMPLIANCE MONITORING WELL', a brown square for 'BACKGROUND MONITORING WELL', a black square with a white cross for 'MONITORING WELL', a green square with a white cross for 'PORE WATER WELL', a green circle for 'LEACHATE WELL', a blue circle with a white dot for 'STAFF GAGE, RIVER', a green circle with a white dot for 'STAFF GAGE, CCR UNIT', and a green circle for 'CCR SOURCE WATER SAMPLE'. The right column lists symbols with their corresponding labels: a solid blue line for 'GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)', a dashed blue line for 'INFERRRED GROUNDWATER ELEVATION CONTOUR', a blue arrow pointing right for 'GROUNDWATER FLOW DIRECTION', a yellow outlined box for 'REGULATED UNIT (SUBJECT UNIT)', a black rectangle for 'SITE FEATURE', a grey hatched area for 'LIMITS OF FINAL COVER', and a black dashed line for 'PROPERTY BOUNDARY'.

POTENTIOMETRIC SURFACE MAP OCTOBER 28 AND 29, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
ASH BOND NO. 2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

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POTENTIOMETRIC SURFACE MAP
NOVEMBER 19, 2024

- 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)
- INFERRRED 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
ASH POND NO. 2
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

FIGURE 14



- 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
 - L PROPERTY BOUNDARY

POTENTIOMETRIC SURFACE MAP
DECEMBER 11-13, 2024

**2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT**
ACLU BOND NO. 2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

ATTACHMENTS

ATTACHMENT A
GROUNDWATER ELEVATION DATA

ATTACHMENT A**GROUNDWATER ELEVATION DATA**

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

COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G1001	Compliance	LCU	01/12/2024	4.44	593.33
G1001	Compliance	LCU	02/12/2024	6.73	591.05
G1001	Compliance	LCU	03/29/2024	6.11	591.66
G1001	Compliance	LCU	04/29/2024	3.75	594.03
G1001	Compliance	LCU	05/29/2024	5.83	591.83
G1001	Compliance	LCU	06/29/2024	6.88	590.78
G1001	Compliance	LCU	07/30/2024	6.17	591.61
G1001	Compliance	LCU	08/28/2024	6.79	590.88
G1001	Compliance	LCU	09/28/2024	4.01	593.66
G1001	Compliance	LCU	10/28/2024	6.27	591.41
G1001	Compliance	LCU	11/19/2024	3.82	593.84
G1001	Compliance	LCU	12/12/2024	6.09	591.59
G1003	Water Level	LCU	01/12/2024	DM ¹	
G1003	Water Level	LCU	02/12/2024	Dry	
G1003	Water Level	LCU	03/29/2024	DM ¹	
G1003	Water Level	LCU	04/29/2024	Dry	
G1003	Water Level	LCU	05/29/2024	DM ¹	
G1003	Water Level	LCU	06/29/2024	DM ¹	
G1003	Water Level	LCU	07/29/2024	Dry	
G1003	Water Level	LCU	08/28/2024	DM ¹	
G1003	Water Level	LCU	09/28/2024	DM ¹	
G1003	Water Level	LCU	10/28/2024	Dry	
G1003	Water Level	LCU	11/19/2024	DM ¹	
G1003	Water Level	LCU	12/12/2024	DM ¹	
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
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

ATTACHMENT A**GROUNDWATER ELEVATION DATA**

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

COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G280	Background	UA	11/19/2024	DM ⁷	
G280	Background	UA	12/13/2024	[7.19]	[618.20]
G281	Background	UA	01/12/2024	4.55	621.87
G281	Background	UA	02/12/2024	5.30	621.13
G281	Background	UA	03/29/2024	4.29	622.13
G281	Background	UA	04/29/2024	4.12	622.31
G281	Background	UA	05/29/2024	4.73	621.96
G281	Background	UA	06/29/2024	8.21	618.47
G281	Background	UA	07/30/2024	6.21	620.22
G281	Background	UA	08/28/2024	8.65	618.04
G281	Background	UA	09/28/2024	6.74	619.95
G281	Background	UA	10/28/2024	9.11	617.59
G281	Background	UA	11/19/2024	5.82	620.87
G281	Background	UA	12/12/2024	7.08	619.62
G401	Compliance	UA	01/12/2024	DM ¹	
G401	Compliance	UA	02/12/2024	21.50	604.07
G401	Compliance	UA	03/29/2024	DM ¹	
G401	Compliance	UA	05/02/2024	[20.94]	[604.63]
G401	Compliance	UA	05/29/2024	DM ¹	
G401	Compliance	UA	06/29/2024	DM ¹	
G401	Compliance	UA	07/29/2024	21.71	603.86
G401	Compliance	UA	08/28/2024	DM ¹	
G401	Compliance	UA	09/28/2024	DM ¹	
G401	Compliance	UA	10/28/2024	27.72	600.85
G401	Compliance	UA	11/19/2024	DM ¹	
G401	Compliance	UA	12/12/2024	DM ¹	
G402	Compliance	UA	01/12/2024	9.67	603.38
G402	Compliance	UA	02/12/2024	9.35	603.71
G402	Compliance	UA	03/29/2024	7.54	605.51
G402	Compliance	UA	04/29/2024	6.46	606.60
G402	Compliance	UA	05/29/2024	8.69	604.50
G402	Compliance	UA	06/29/2024	11.18	602.00
G402	Compliance	UA	07/30/2024	11.13	601.93
G402	Compliance	UA	08/28/2024	11.76	601.43
G402	Compliance	UA	09/28/2024	11.48	601.70
G402	Compliance	UA	10/28/2024	11.67	601.53
G402	Compliance	UA	11/19/2024	9.67	603.52
G402	Compliance	UA	12/12/2024	10.27	602.93
G403	Compliance	UA	01/12/2024	5.07	621.16
G403	Compliance	UA	02/12/2024	6.35	619.89
G403	Compliance	UA	03/29/2024	4.98	621.25
G403	Compliance	UA	04/29/2024	4.22	622.02
G403	Compliance	UA	05/29/2024	7.72	620.50
G403	Compliance	UA	06/29/2024	10.60	617.62
G403	Compliance	UA	07/30/2024	6.63	619.61
G403	Compliance	UA	08/28/2024	8.89	619.33

ATTACHMENT A**GROUNDWATER ELEVATION DATA**

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

COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G403	Compliance	UA	09/28/2024	6.52	621.70
G403	Compliance	UA	10/28/2024	9.51	618.72
G403	Compliance	UA	11/19/2024	5.48	622.74
G403	Compliance	UA	12/12/2024	6.67	621.56
G404	Compliance	UA	01/12/2024	3.01	612.65
G404	Compliance	UA	02/12/2024	4.23	611.44
G404	Compliance	UA	03/29/2024	3.44	612.22
G404	Compliance	UA	04/29/2024	2.64	613.03
G404	Compliance	UA	05/29/2024	3.53	612.09
G404	Compliance	UA	06/29/2024	6.03	609.59
G404	Compliance	UA	07/30/2024	4.49	611.18
G404	Compliance	UA	08/28/2024	6.10	609.52
G404	Compliance	UA	09/28/2024	4.12	611.50
G404	Compliance	UA	10/28/2024	6.36	609.27
G404	Compliance	UA	11/19/2024	3.47	612.15
G404	Compliance	UA	12/12/2024	4.79	610.84
G405	Compliance	UA	01/12/2024	5.07	618.33
G405	Compliance	UA	02/12/2024	8.24	615.17
G405	Compliance	UA	03/29/2024	5.82	617.58
G405	Compliance	UA	04/29/2024	4.23	619.18
G405	Compliance	UA	05/29/2024	5.80	617.68
G405	Compliance	UA	06/29/2024	7.13	616.35
G405	Compliance	UA	07/30/2024	6.10	617.31
G405	Compliance	UA	08/28/2024	DM ⁷	
G405	Compliance	UA	09/28/2024	DM ⁷	
G405	Compliance	UA	10/28/2024	7.57	615.92
G405	Compliance	UA	11/19/2024	DM ⁷	
G405	Compliance	UA	12/13/2024	[6.55]	[616.94]
G406	Compliance	UA	01/12/2024	10.19	614.85
G406	Compliance	UA	02/12/2024	11.47	613.58
G406	Compliance	UA	03/29/2024	10.32	614.72
G406	Compliance	UA	04/29/2024	9.40	615.65
G406	Compliance	UA	05/29/2024	11.81	614.86
G406	Compliance	UA	06/29/2024	15.13	611.55
G406	Compliance	UA	07/30/2024	11.15	613.90
G406	Compliance	UA	08/28/2024	13.74	612.93
G406	Compliance	UA	09/28/2024	10.79	615.88
G406	Compliance	UA	10/28/2024	14.21	612.47
G406	Compliance	UA	11/19/2024	10.42	616.26
G406	Compliance	UA	12/12/2024	12.33	614.35
G407	Compliance	UA	01/12/2024	4.25	616.69
G407	Compliance	UA	02/12/2024	6.05	614.90
G407	Compliance	UA	03/29/2024	6.25	614.69
G407	Compliance	UA	04/29/2024	5.27	615.68
G407	Compliance	UA	05/29/2024	5.61	615.44
G407	Compliance	UA	06/29/2024	7.75	613.30

ATTACHMENT A
GROUNDWATER ELEVATION DATA

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

COFFEEN POWER PLANT

ASH POND NO. 2

COFFEEN, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G407	Compliance	UA	07/29/2024	6.74	614.21
G407	Compliance	UA	08/28/2024	7.74	613.31
G407	Compliance	UA	09/28/2024	5.80	615.26
G407	Compliance	UA	10/28/2024	7.91	613.15
G407	Compliance	UA	11/19/2024	5.26	615.79
G407	Compliance	UA	12/12/2024	6.72	614.34
SG-02	Water Level	SW	01/12/2024	6.86	599.17
SG-02	Water Level	SW	02/12/2024	7.22	598.82
SG-02	Water Level	SW	03/29/2024	7.03	599.00
SG-02	Water Level	SW	04/29/2024	6.68	599.36
SG-02	Water Level	SW	05/29/2024	6.58	599.18
SG-02	Water Level	SW	06/29/2024	6.92	598.84
SG-02	Water Level	SW	07/30/2024	7.13	598.91
SG-02	Water Level	SW	08/28/2024	6.20	599.56
SG-02	Water Level	SW	09/28/2024	5.97	599.79
SG-02	Water Level	SW	10/28/2024	6.21	599.55
SG-02	Water Level	SW	10/29/2024	6.17	599.60
SG-02	Water Level	SW	11/19/2024	6.99	598.77
SG-02	Water Level	SW	12/12/2024	7.17	598.60
SG-03	Water Level	SW	01/12/2024	8.21	577.71
SG-03	Water Level	SW	02/12/2024	8.44	577.49
SG-03	Water Level	SW	03/29/2024	8.61	577.31
SG-03	Water Level	SW	04/29/2024	7.94	577.99
SG-03	Water Level	SW	05/29/2024	8.52	577.40
SG-03	Water Level	SW	06/29/2024	8.99	576.93
SG-03	Water Level	SW	07/30/2024	8.69	577.24
SG-03	Water Level	SW	08/28/2024	DM ⁷	
SG-03	Water Level	SW	09/28/2024	DM ⁷	
SG-03	Water Level	SW	10/29/2024	9.72	576.21
SG-03	Water Level	SW	11/19/2024	8.99	576.93
SG-03	Water Level	SW	12/11/2024	8.80	577.13

Notes:

BMP = below measuring point

Bracketing [] indicates that the measurement was obtained outside of the episodic depth to groundwater measurements time frame.

Depth to Groundwater/Groundwater Elevation Code (if applicable):

DM¹ = Depth to water was not measured.

DM² = Depth to water was not measured because water was above or below the staff gage markings.

DM³ = Depth to water was not measured because the location was inaccessible.

DM⁴ = Depth to water was not measured because water level was below the top of the pump.

DM⁵ = Depth to water was not measured because water level was above the top of casing (artesian well).

DM⁶ = Depth to water was not measured because of damage to the well.

DM⁷ = Depth to water was not measured due to required pressure transducer maintenance.

DM⁸ = Lab provided groundwater elevation data and not depth to water.

NAVD88 = North American Vertical Datum of 1988

Monitored Unit Abbreviations:

LCU = lower confining unit

SW = surface water

UA = uppermost aquifer

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ATTACHMENT B
COMPARISON TO BACKGROUND

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 1, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G1001	LCU	E004	Antimony, total	mg/L	02/15/23 - 02/15/24	4	75	CI around median (Last Sample, n<7)	0.001	0.003
G1001	LCU	E004	Arsenic, total	mg/L	02/15/23 - 02/15/24	4	50	CI around geomean	0.000128	0.00660
G1001	LCU	E004	Barium, total	mg/L	02/15/23 - 02/15/24	4	0	CI around mean	-0.0407	0.140
G1001	LCU	E004	Beryllium, total	mg/L	02/15/23 - 02/15/24	4	75	CI around median (Last Sample, n<7)	0.001	0.001
G1001	LCU	E004	Boron, total	mg/L	05/12/21 - 02/15/24	5	0	CI around mean	0.614	0.0290
G1001	LCU	E004	Cadmium, total	mg/L	02/15/23 - 02/15/24	4	100	All ND - Last	0.001	0.001
G1001	LCU	E004	Chloride, total	mg/L	05/12/21 - 02/15/24	5	0	CI around mean	8.05	75.0
G1001	LCU	E004	Chromium, total	mg/L	02/15/23 - 02/15/24	4	50	CI around geomean	0.000178	0.0190
G1001	LCU	E004	Cobalt, total	mg/L	05/12/21 - 02/15/24	5	60	CI around median (Last Sample, n<7)	0.001	0.00590
G1001	LCU	E004	Fluoride, total	mg/L	02/15/23 - 02/15/24	4	50	CI around median (Last Sample, n<7)	0.25	0.513
G1001	LCU	E004	Lead, total	mg/L	02/15/23 - 02/15/24	4	50	CI around median (Last Sample, n<7)	0.001	0.0120
G1001	LCU	E004	Lithium, total	mg/L	05/12/21 - 02/15/24	5	20	CI around mean	0.000345	0.0190
G1001	LCU	E004	Mercury, total	mg/L	02/15/23 - 02/15/24	4	100	All ND - Last	0.0002	0.0002
G1001	LCU	E004	Molybdenum, total	mg/L	02/15/23 - 02/15/24	4	0	CI around mean	-0.000264	0.00450
G1001	LCU	E004	pH (field)	SU	02/15/23 - 02/15/24	4	0	CI around median (Last Sample, n<7)	7.0/7.0	6.6/7.5
G1001	LCU	E004	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 02/15/24	4	0	CI around mean	-3.72	1.89
G1001	LCU	E004	Selenium, total	mg/L	02/15/23 - 02/15/24	4	75	CI around median (Last Sample, n<7)	0.001	0.00480
G1001	LCU	E004	Sulfate, total	mg/L	05/12/21 - 02/15/24	5	0	CI around mean	-6.24	370
G1001	LCU	E004	Thallium, total	mg/L	02/15/23 - 02/15/24	4	100	All ND - Last	0.002	0.001
G1001	LCU	E004	Total Dissolved Solids	mg/L	02/15/23 - 02/15/24	4	0	CI around mean	232	840
G401	UA	E004	Antimony, total	mg/L	11/21/15 - 02/21/24	25	100	All ND - Last	0.001	0.003
G401	UA	E004	Arsenic, total	mg/L	11/21/15 - 02/21/24	28	50	CB around T-S line	-0.0153	0.00660
G401	UA	E004	Barium, total	mg/L	11/21/15 - 02/21/24	28	0	CB around T-S line	-0.183	0.140
G401	UA	E004	Beryllium, total	mg/L	11/21/15 - 02/21/24	27	82	CI around median	0.001	0.001
G401	UA	E004	Boron, total	mg/L	11/21/15 - 02/21/24	29	0	CI around median	3.6	0.0290
G401	UA	E004	Cadmium, total	mg/L	11/21/15 - 02/21/24	28	68	CB around T-S line	-0.00174	0.001
G401	UA	E004	Chloride, total	mg/L	11/21/15 - 02/21/24	29	10	CI around geomean	2.93	75.0

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 1, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G401	UA	E004	Chromium, total	mg/L	11/21/15 - 02/21/24	28	68	CB around T-S line	-0.0283	0.0190
G401	UA	E004	Cobalt, total	mg/L	11/21/15 - 02/21/24	28	0	CB around linear reg	0.0693	0.00590
G401	UA	E004	Fluoride, total	mg/L	11/21/15 - 02/21/24	29	86	CB around T-S line	0.222	0.513
G401	UA	E004	Lead, total	mg/L	11/21/15 - 02/21/24	27	67	CB around T-S line	-0.0276	0.0120
G401	UA	E004	Lithium, total	mg/L	11/21/15 - 02/21/24	30	3	CB around T-S line	-0.00613	0.0190
G401	UA	E004	Mercury, total	mg/L	11/21/15 - 02/21/24	27	82	CI around median	0.0002	0.0002
G401	UA	E004	Molybdenum, total	mg/L	11/21/15 - 02/21/24	28	71	CI around median	0.001	0.00450
G401	UA	E004	pH (field)	SU	11/21/15 - 02/21/24	31	0	CI around mean	5.9/6.1	6.6/7.5
G401	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 02/21/24	28	0	CI around geomean	0.477	1.89
G401	UA	E004	Selenium, total	mg/L	11/21/15 - 02/21/24	28	64	CB around T-S line	-0.00157	0.00480
G401	UA	E004	Sulfate, total	mg/L	11/21/15 - 02/21/24	29	0	CI around median	2,000	370
G401	UA	E004	Thallium, total	mg/L	11/21/15 - 02/21/24	25	100	All ND - Last	0.002	0.001
G401	UA	E004	Total Dissolved Solids	mg/L	11/21/15 - 02/21/24	29	0	CI around median	2,800	840
G402	UA	E004	Antimony, total	mg/L	11/21/15 - 02/21/24	25	100	All ND - Last	0.001	0.003
G402	UA	E004	Arsenic, total	mg/L	11/21/15 - 02/21/24	28	0	CB around linear reg	-0.00498	0.00660
G402	UA	E004	Barium, total	mg/L	11/21/15 - 02/21/24	28	0	CB around linear reg	-0.00128	0.140
G402	UA	E004	Beryllium, total	mg/L	11/21/15 - 02/21/24	27	100	All ND - Last	0.001	0.001
G402	UA	E004	Boron, total	mg/L	11/21/15 - 02/21/24	29	0	CB around T-S line	4.27	0.0290
G402	UA	E004	Cadmium, total	mg/L	11/21/15 - 02/21/24	28	96	Most recent sample	0.001	0.001
G402	UA	E004	Chloride, total	mg/L	11/21/15 - 02/21/24	29	24	CI around mean	1.6	75.0
G402	UA	E004	Chromium, total	mg/L	11/21/15 - 02/21/24	28	43	CB around T-S line	-0.00593	0.0190
G402	UA	E004	Cobalt, total	mg/L	11/21/15 - 02/21/24	28	21	CB around linear reg	-0.00283	0.00590
G402	UA	E004	Fluoride, total	mg/L	11/21/15 - 02/21/24	29	14	CI around median	0.295	0.513
G402	UA	E004	Lead, total	mg/L	11/21/15 - 02/21/24	27	30	CB around linear reg	-0.00408	0.0120
G402	UA	E004	Lithium, total	mg/L	11/21/15 - 02/21/24	28	4	CB around linear reg	0.0113	0.0190
G402	UA	E004	Mercury, total	mg/L	11/21/15 - 02/21/24	27	100	All ND - Last	0.0002	0.0002
G402	UA	E004	Molybdenum, total	mg/L	11/21/15 - 02/21/24	28	0	CB around linear reg	0.00102	0.00450

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 1, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G402	UA	E004	pH (field)	SU	11/21/15 - 02/21/24	29	0	CI around mean	6.7/6.8	6.6/7.5
G402	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 02/21/24	28	0	CI around median	0.547	1.89
G402	UA	E004	Selenium, total	mg/L	11/21/15 - 02/21/24	28	79	CB around T-S line	0.000599	0.00480
G402	UA	E004	Sulfate, total	mg/L	11/21/15 - 02/21/24	29	0	CB around T-S line	379	370
G402	UA	E004	Thallium, total	mg/L	11/21/15 - 02/21/24	25	100	All ND - Last	0.002	0.001
G402	UA	E004	Total Dissolved Solids	mg/L	11/21/15 - 02/21/24	29	0	CB around linear reg	1,260	840
G403	UA	E004	Antimony, total	mg/L	11/23/15 - 02/21/24	25	100	All ND - Last	0.001	0.003
G403	UA	E004	Arsenic, total	mg/L	11/23/15 - 02/21/24	28	61	CB around T-S line	0.000114	0.00660
G403	UA	E004	Barium, total	mg/L	11/23/15 - 02/21/24	28	0	CB around T-S line	0.0798	0.140
G403	UA	E004	Beryllium, total	mg/L	11/23/15 - 02/21/24	27	100	All ND - Last	0.001	0.001
G403	UA	E004	Boron, total	mg/L	11/23/15 - 02/21/24	29	17	CI around geomean	0.0163	0.0290
G403	UA	E004	Cadmium, total	mg/L	11/23/15 - 02/21/24	28	100	All ND - Last	0.001	0.001
G403	UA	E004	Chloride, total	mg/L	11/23/15 - 02/21/24	29	0	CB around linear reg	4.49	75.0
G403	UA	E004	Chromium, total	mg/L	11/23/15 - 02/21/24	28	93	CB around T-S line	0.00207	0.0190
G403	UA	E004	Cobalt, total	mg/L	11/23/15 - 02/21/24	28	57	CI around median	0.002	0.00590
G403	UA	E004	Fluoride, total	mg/L	11/23/15 - 02/21/24	29	10	CB around T-S line	0.216	0.513
G403	UA	E004	Lead, total	mg/L	11/23/15 - 02/21/24	27	89	CI around median	0.001	0.0120
G403	UA	E004	Lithium, total	mg/L	11/23/15 - 02/21/24	28	93	CI around median	0.01	0.0190
G403	UA	E004	Mercury, total	mg/L	11/23/15 - 02/21/24	27	100	All ND - Last	0.0002	0.0002
G403	UA	E004	Molybdenum, total	mg/L	11/23/15 - 02/21/24	28	75	CI around median	0.001	0.00450
G403	UA	E004	pH (field)	SU	11/23/15 - 02/21/24	29	0	CI around mean	6.8/7.0	6.6/7.5
G403	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/23/15 - 02/21/24	28	0	CI around mean	0.61	1.89
G403	UA	E004	Selenium, total	mg/L	11/23/15 - 02/21/24	28	96	CI around median	0.001	0.00480
G403	UA	E004	Sulfate, total	mg/L	11/23/15 - 02/21/24	29	0	CB around T-S line	57.3	370
G403	UA	E004	Thallium, total	mg/L	11/23/15 - 02/21/24	25	100	All ND - Last	0.002	0.001
G403	UA	E004	Total Dissolved Solids	mg/L	11/23/15 - 02/21/24	29	0	CB around linear reg	391	840
G404	UA	E004	Antimony, total	mg/L	11/21/15 - 02/21/24	25	96	CB around T-S line	0.00244	0.003

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 1, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G404	UA	E004	Arsenic, total	mg/L	11/21/15 - 02/21/24	28	86	CI around median	0.001	0.00660
G404	UA	E004	Barium, total	mg/L	11/21/15 - 02/21/24	28	0	CB around linear reg	0.0216	0.140
G404	UA	E004	Beryllium, total	mg/L	11/21/15 - 02/21/24	27	100	All ND - Last	0.001	0.001
G404	UA	E004	Boron, total	mg/L	11/21/15 - 02/21/24	29	0	CB around linear reg	6.77	0.0290
G404	UA	E004	Cadmium, total	mg/L	11/21/15 - 02/21/24	28	100	All ND - Last	0.001	0.001
G404	UA	E004	Chloride, total	mg/L	11/21/15 - 02/21/24	29	0	CB around linear reg	103	75.0
G404	UA	E004	Chromium, total	mg/L	11/21/15 - 02/21/24	28	97	CB around T-S line	0.004	0.0190
G404	UA	E004	Cobalt, total	mg/L	11/21/15 - 02/21/24	28	93	CI around median	0.002	0.00590
G404	UA	E004	Fluoride, total	mg/L	11/21/15 - 02/21/24	29	73	CI around median	0.25	0.513
G404	UA	E004	Lead, total	mg/L	11/21/15 - 02/21/24	27	96	CI around median	0.001	0.0120
G404	UA	E004	Lithium, total	mg/L	11/21/15 - 02/21/24	28	79	CB around T-S line	0.01	0.0190
G404	UA	E004	Mercury, total	mg/L	11/21/15 - 02/21/24	27	100	All ND - Last	0.0002	0.0002
G404	UA	E004	Molybdenum, total	mg/L	11/21/15 - 02/21/24	28	100	All ND - Last	0.0015	0.00450
G404	UA	E004	pH (field)	SU	11/21/15 - 02/21/24	29	0	CB around linear reg	6.5/6.8	6.6/7.5
G404	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 02/21/24	28	0	CI around mean	0.601	1.89
G404	UA	E004	Selenium, total	mg/L	11/21/15 - 02/21/24	28	100	All ND - Last	0.001	0.00480
G404	UA	E004	Sulfate, total	mg/L	11/21/15 - 02/21/24	29	0	CB around linear reg	446	370
G404	UA	E004	Thallium, total	mg/L	11/21/15 - 02/21/24	25	100	All ND - Last	0.002	0.001
G404	UA	E004	Total Dissolved Solids	mg/L	11/21/15 - 02/21/24	29	0	CB around linear reg	1,230	840
G405	UA	E004	Antimony, total	mg/L	11/21/15 - 02/21/24	25	92	CB around T-S line	0.00231	0.003
G405	UA	E004	Arsenic, total	mg/L	11/21/15 - 02/21/24	28	31	CB around T-S line	-0.00229	0.00660
G405	UA	E004	Barium, total	mg/L	11/21/15 - 02/21/24	28	0	CB around linear reg	0.00807	0.140
G405	UA	E004	Beryllium, total	mg/L	11/21/15 - 02/21/24	27	100	All ND - Last	0.001	0.001
G405	UA	E004	Boron, total	mg/L	11/21/15 - 02/21/24	29	0	CI around mean	9.39	0.0290
G405	UA	E004	Cadmium, total	mg/L	11/21/15 - 02/21/24	28	97	CI around median	0.001	0.001
G405	UA	E004	Chloride, total	mg/L	11/21/15 - 02/21/24	29	0	CI around geomean	9.4	75.0
G405	UA	E004	Chromium, total	mg/L	11/21/15 - 02/21/24	28	90	CB around T-S line	0.00342	0.0190

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 1, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G405	UA	E004	Cobalt, total	mg/L	11/21/15 - 02/21/24	28	66	CB around T-S line	0.000987	0.00590
G405	UA	E004	Fluoride, total	mg/L	11/21/15 - 02/21/24	29	10	CB around linear reg	0.232	0.513
G405	UA	E004	Lead, total	mg/L	11/21/15 - 02/21/24	27	50	CB around T-S line	-0.00128	0.0120
G405	UA	E004	Lithium, total	mg/L	11/21/15 - 02/21/24	28	89	CI around median	0.01	0.0190
G405	UA	E004	Mercury, total	mg/L	11/21/15 - 02/21/24	27	100	All ND - Last	0.0002	0.0002
G405	UA	E004	Molybdenum, total	mg/L	11/21/15 - 02/21/24	28	41	CI around median	0.001	0.00450
G405	UA	E004	pH (field)	SU	11/21/15 - 02/21/24	29	0	CI around mean	6.8/7.0	6.6/7.5
G405	UA	E004	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 02/21/24	28	0	CI around median	0.541	1.89
G405	UA	E004	Selenium, total	mg/L	11/21/15 - 02/21/24	28	90	CI around median	0.001	0.00480
G405	UA	E004	Sulfate, total	mg/L	11/21/15 - 02/21/24	29	0	CI around mean	899	370
G405	UA	E004	Thallium, total	mg/L	11/21/15 - 02/21/24	25	100	All ND - Last	0.002	0.001
G405	UA	E004	Total Dissolved Solids	mg/L	11/21/15 - 02/21/24	29	0	CI around mean	1,550	840
G406	UA	E004	Antimony, total	mg/L	10/14/20 - 02/21/24	14	100	All ND - Last	0.001	0.003
G406	UA	E004	Arsenic, total	mg/L	10/14/20 - 02/21/24	14	93	CI around median	0.001	0.00660
G406	UA	E004	Barium, total	mg/L	10/14/20 - 02/21/24	14	0	CI around median	0.0124	0.140
G406	UA	E004	Beryllium, total	mg/L	10/14/20 - 02/21/24	14	100	All ND - Last	0.001	0.001
G406	UA	E004	Boron, total	mg/L	10/14/20 - 02/21/24	14	0	CI around median	1.4	0.0290
G406	UA	E004	Cadmium, total	mg/L	10/14/20 - 02/21/24	14	100	All ND - Last	0.001	0.001
G406	UA	E004	Chloride, total	mg/L	10/14/20 - 02/21/24	14	14	CI around mean	2.99	75.0
G406	UA	E004	Chromium, total	mg/L	10/14/20 - 02/21/24	14	93	CB around T-S line	0.00101	0.0190
G406	UA	E004	Cobalt, total	mg/L	10/14/20 - 02/21/24	14	100	All ND - Last	0.001	0.00590
G406	UA	E004	Fluoride, total	mg/L	10/14/20 - 02/21/24	14	14	CI around mean	0.237	0.513
G406	UA	E004	Lead, total	mg/L	10/14/20 - 02/21/24	14	93	CI around median	0.001	0.0120
G406	UA	E004	Lithium, total	mg/L	10/14/20 - 02/21/24	14	79	CB around T-S line	0.0127	0.0190
G406	UA	E004	Mercury, total	mg/L	10/14/20 - 02/21/24	14	100	All ND - Last	0.0002	0.0002
G406	UA	E004	Molybdenum, total	mg/L	10/14/20 - 02/21/24	14	93	CI around median	0.001	0.00450
G406	UA	E004	pH (field)	SU	10/14/20 - 02/21/24	14	0	CI around mean	6.5/6.7	6.6/7.5

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 1, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G406	UA	E004	Radium 226 + Radium 228, total	pCi/L	10/14/20 - 02/21/24	14	0	CI around mean	0.283	1.89
G406	UA	E004	Selenium, total	mg/L	10/14/20 - 02/21/24	14	100	All ND - Last	0.001	0.00480
G406	UA	E004	Sulfate, total	mg/L	10/14/20 - 02/21/24	14	0	CI around median	450	370
G406	UA	E004	Thallium, total	mg/L	10/14/20 - 02/21/24	14	100	All ND - Last	0.002	0.001
G406	UA	E004	Total Dissolved Solids	mg/L	10/14/20 - 02/21/24	14	0	CI around mean	1,010	840
G407	UA	E004	Antimony, total	mg/L	10/14/20 - 02/20/24	14	100	All ND - Last	0.001	0.003
G407	UA	E004	Arsenic, total	mg/L	10/14/20 - 02/20/24	14	86	CI around median	0.001	0.00660
G407	UA	E004	Barium, total	mg/L	10/14/20 - 02/20/24	14	0	CI around median	0.012	0.140
G407	UA	E004	Beryllium, total	mg/L	10/14/20 - 02/20/24	14	100	All ND - Last	0.001	0.001
G407	UA	E004	Boron, total	mg/L	10/14/20 - 02/20/24	14	0	CI around mean	0.0755	0.0290
G407	UA	E004	Cadmium, total	mg/L	10/14/20 - 02/20/24	14	100	All ND - Last	0.001	0.001
G407	UA	E004	Chloride, total	mg/L	10/14/20 - 02/20/24	14	0	CI around geomean	11.4	75.0
G407	UA	E004	Chromium, total	mg/L	10/14/20 - 02/20/24	14	79	CI around median	0.0018	0.0190
G407	UA	E004	Cobalt, total	mg/L	10/14/20 - 02/20/24	14	86	CI around median	0.002	0.00590
G407	UA	E004	Fluoride, total	mg/L	10/14/20 - 02/20/24	14	21	CI around geomean	0.265	0.513
G407	UA	E004	Lead, total	mg/L	10/14/20 - 02/20/24	14	93	CI around median	0.001	0.0120
G407	UA	E004	Lithium, total	mg/L	10/14/20 - 02/20/24	14	0	CI around median	0.038	0.0190
G407	UA	E004	Mercury, total	mg/L	10/14/20 - 02/20/24	14	100	All ND - Last	0.0002	0.0002
G407	UA	E004	Molybdenum, total	mg/L	10/14/20 - 02/20/24	14	21	CI around median	0.0013	0.00450
G407	UA	E004	pH (field)	SU	10/14/20 - 02/20/24	14	0	CI around mean	6.6/6.7	6.6/7.5
G407	UA	E004	Radium 226 + Radium 228, total	pCi/L	10/14/20 - 02/20/24	14	0	CI around mean	0.263	1.89
G407	UA	E004	Selenium, total	mg/L	10/14/20 - 02/20/24	14	100	All ND - Last	0.001	0.00480
G407	UA	E004	Sulfate, total	mg/L	10/14/20 - 02/20/24	14	0	CI around median	830	370
G407	UA	E004	Thallium, total	mg/L	10/14/20 - 02/20/24	14	100	All ND - Last	0.002	0.001
G407	UA	E004	Total Dissolved Solids	mg/L	10/14/20 - 02/20/24	14	0	CI around mean	1,920	840

**ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 1, 2024**

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Notes:

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

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 B.
COMPARISON TO BACKGROUND - QUARTER 2, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G1001	LCU	E005	Antimony, total	mg/L	02/15/23 - 05/07/24	5	80	CI around median (Last Sample, n<7)	0.001	0.003
G1001	LCU	E005	Arsenic, total	mg/L	02/15/23 - 05/07/24	5	60	CI around median (Last Sample, n<7)	0.001	0.00660
G1001	LCU	E005	Barium, total	mg/L	02/15/23 - 05/07/24	5	0	CI around mean	-0.00928	0.140
G1001	LCU	E005	Beryllium, total	mg/L	02/15/23 - 05/07/24	5	80	CI around median (Last Sample, n<7)	0.001	0.001
G1001	LCU	E005	Boron, total	mg/L	05/12/21 - 05/07/24	6	0	CI around mean	0.669	0.0290
G1001	LCU	E005	Cadmium, total	mg/L	02/15/23 - 05/07/24	5	100	All ND - Last	0.001	0.001
G1001	LCU	E005	Chloride, total	mg/L	05/12/21 - 05/07/24	6	0	CI around mean	7.65	75.0
G1001	LCU	E005	Chromium, total	mg/L	02/15/23 - 05/07/24	5	40	CI around geommean	0.000462	0.0190
G1001	LCU	E005	Cobalt, total	mg/L	05/12/21 - 05/07/24	6	67	CI around median (Last Sample, n<7)	0.001	0.00590
G1001	LCU	E005	Fluoride, total	mg/L	02/15/23 - 05/07/24	5	40	CI around mean	0.222	0.513
G1001	LCU	E005	Lead, total	mg/L	02/15/23 - 05/07/24	5	60	CI around median (Last Sample, n<7)	0.001	0.0120
G1001	LCU	E005	Lithium, total	mg/L	05/12/21 - 05/07/24	6	17	CI around mean	0.00186	0.0190
G1001	LCU	E005	Mercury, total	mg/L	02/15/23 - 05/07/24	5	100	All ND - Last	0.0002	0.0002
G1001	LCU	E005	Molybdenum, total	mg/L	02/15/23 - 05/07/24	5	0	CI around mean	0.0024	0.00450
G1001	LCU	E005	pH (field)	SU	02/15/23 - 05/07/24	5	0	CI around mean	6.8/7.1	6.6/7.5
G1001	LCU	E005	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 05/07/24	5	0	CI around geommean	0.219	1.89
G1001	LCU	E005	Selenium, total	mg/L	02/15/23 - 05/07/24	5	80	CI around median (Last Sample, n<7)	0.001	0.00480
G1001	LCU	E005	Sulfate, total	mg/L	05/12/21 - 05/07/24	6	0	CI around mean	34.3	370
G1001	LCU	E005	Thallium, total	mg/L	02/15/23 - 05/07/24	5	100	All ND - Last	0.002	0.001
G1001	LCU	E005	Total Dissolved Solids	mg/L	02/15/23 - 05/07/24	5	0	CI around mean	426	840
G401	UA	E005	Antimony, total	mg/L	11/21/15 - 05/02/24	26	100	All ND - Last	0.001	0.003
G401	UA	E005	Arsenic, total	mg/L	11/21/15 - 05/02/24	29	52	CB around T-S line	-0.0152	0.00660
G401	UA	E005	Barium, total	mg/L	11/21/15 - 05/02/24	29	0	CB around T-S line	-0.166	0.140
G401	UA	E005	Beryllium, total	mg/L	11/21/15 - 05/02/24	28	82	CI around median	0.001	0.001
G401	UA	E005	Boron, total	mg/L	11/21/15 - 05/02/24	30	0	CI around median	3.5	0.0290
G401	UA	E005	Cadmium, total	mg/L	11/21/15 - 05/02/24	29	69	CB around T-S line	-0.00171	0.001
G401	UA	E005	Chloride, total	mg/L	11/21/15 - 05/02/24	30	10	CI around geommean	3	75.0

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G401	UA	E005	Chromium, total	mg/L	11/21/15 - 05/02/24	29	69	CB around T-S line	-0.034	0.0190
G401	UA	E005	Cobalt, total	mg/L	11/21/15 - 05/02/24	29	0	CB around linear reg	0.0574	0.00590
G401	UA	E005	Fluoride, total	mg/L	11/21/15 - 05/02/24	30	83	CB around T-S line	0.222	0.513
G401	UA	E005	Lead, total	mg/L	11/21/15 - 05/02/24	28	68	CB around T-S line	-0.0194	0.0120
G401	UA	E005	Lithium, total	mg/L	11/21/15 - 05/02/24	31	3	CB around T-S line	-0.00462	0.0190
G401	UA	E005	Mercury, total	mg/L	11/21/15 - 05/02/24	28	82	CI around median	0.0002	0.0002
G401	UA	E005	Molybdenum, total	mg/L	11/21/15 - 05/02/24	29	72	CI around median	0.001	0.00450
G401	UA	E005	pH (field)	SU	11/21/15 - 05/02/24	32	0	CI around mean	5.9/6.1	6.6/7.5
G401	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 05/02/24	29	0	CI around geomean	0.468	1.89
G401	UA	E005	Selenium, total	mg/L	11/21/15 - 05/02/24	29	66	CB around T-S line	-0.00176	0.00480
G401	UA	E005	Sulfate, total	mg/L	11/21/15 - 05/02/24	30	0	CB around T-S line	1,300	370
G401	UA	E005	Thallium, total	mg/L	11/21/15 - 05/02/24	26	100	All ND - Last	0.002	0.001
G401	UA	E005	Total Dissolved Solids	mg/L	11/21/15 - 05/02/24	30	0	CI around median	2,800	840
G402	UA	E005	Antimony, total	mg/L	11/21/15 - 05/06/24	26	100	All ND - Last	0.001	0.003
G402	UA	E005	Arsenic, total	mg/L	11/21/15 - 05/06/24	29	0	CB around linear reg	-0.00488	0.00660
G402	UA	E005	Barium, total	mg/L	11/21/15 - 05/06/24	29	0	CB around linear reg	-0.00122	0.140
G402	UA	E005	Beryllium, total	mg/L	11/21/15 - 05/06/24	28	100	All ND - Last	0.001	0.001
G402	UA	E005	Boron, total	mg/L	11/21/15 - 05/06/24	30	0	CB around T-S line	4.52	0.0290
G402	UA	E005	Cadmium, total	mg/L	11/21/15 - 05/06/24	29	97	Most recent sample	0.001	0.001
G402	UA	E005	Chloride, total	mg/L	11/21/15 - 05/06/24	30	27	CI around mean	1.6	75.0
G402	UA	E005	Chromium, total	mg/L	11/21/15 - 05/06/24	29	41	CB around T-S line	-0.00599	0.0190
G402	UA	E005	Cobalt, total	mg/L	11/21/15 - 05/06/24	29	21	CB around linear reg	-0.00286	0.00590
G402	UA	E005	Fluoride, total	mg/L	11/21/15 - 05/06/24	30	13	CI around median	0.295	0.513
G402	UA	E005	Lead, total	mg/L	11/21/15 - 05/06/24	28	32	CB around linear reg	-0.00398	0.0120
G402	UA	E005	Lithium, total	mg/L	11/21/15 - 05/06/24	29	3	CB around linear reg	0.0115	0.0190
G402	UA	E005	Mercury, total	mg/L	11/21/15 - 05/06/24	28	100	All ND - Last	0.0002	0.0002
G402	UA	E005	Molybdenum, total	mg/L	11/21/15 - 05/06/24	29	0	CB around linear reg	0.00106	0.00450

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G402	UA	E005	pH (field)	SU	11/21/15 - 05/06/24	30	0	CB around linear reg	6.8/7.0	6.6/7.5
G402	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 05/06/24	29	0	CI around median	0.547	1.89
G402	UA	E005	Selenium, total	mg/L	11/21/15 - 05/06/24	29	79	CB around T-S line	0.000644	0.00480
G402	UA	E005	Sulfate, total	mg/L	11/21/15 - 05/06/24	30	0	CB around T-S line	360	370
G402	UA	E005	Thallium, total	mg/L	11/21/15 - 05/06/24	26	100	All ND - Last	0.002	0.001
G402	UA	E005	Total Dissolved Solids	mg/L	11/21/15 - 05/06/24	30	0	CB around linear reg	1,260	840
G403	UA	E005	Antimony, total	mg/L	11/23/15 - 05/06/24	26	100	All ND - Last	0.001	0.003
G403	UA	E005	Arsenic, total	mg/L	11/23/15 - 05/06/24	29	62	CB around T-S line	2.51e-05	0.00660
G403	UA	E005	Barium, total	mg/L	11/23/15 - 05/06/24	29	0	CB around T-S line	0.0755	0.140
G403	UA	E005	Beryllium, total	mg/L	11/23/15 - 05/06/24	28	100	All ND - Last	0.001	0.001
G403	UA	E005	Boron, total	mg/L	11/23/15 - 05/06/24	30	20	CI around geomean	0.0154	0.0290
G403	UA	E005	Cadmium, total	mg/L	11/23/15 - 05/06/24	29	100	All ND - Last	0.001	0.001
G403	UA	E005	Chloride, total	mg/L	11/23/15 - 05/06/24	30	0	CB around linear reg	4.71	75.0
G403	UA	E005	Chromium, total	mg/L	11/23/15 - 05/06/24	29	93	CB around T-S line	0.00245	0.0190
G403	UA	E005	Cobalt, total	mg/L	11/23/15 - 05/06/24	29	59	CI around median	0.002	0.00590
G403	UA	E005	Fluoride, total	mg/L	11/23/15 - 05/06/24	30	10	CB around T-S line	0.215	0.513
G403	UA	E005	Lead, total	mg/L	11/23/15 - 05/06/24	28	89	CI around median	0.001	0.0120
G403	UA	E005	Lithium, total	mg/L	11/23/15 - 05/06/24	29	90	CI around median	0.01	0.0190
G403	UA	E005	Mercury, total	mg/L	11/23/15 - 05/06/24	28	100	All ND - Last	0.0002	0.0002
G403	UA	E005	Molybdenum, total	mg/L	11/23/15 - 05/06/24	29	76	CI around median	0.001	0.00450
G403	UA	E005	pH (field)	SU	11/23/15 - 05/06/24	30	0	CI around mean	6.8/7.0	6.6/7.5
G403	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/23/15 - 05/06/24	29	0	CI around mean	0.607	1.89
G403	UA	E005	Selenium, total	mg/L	11/23/15 - 05/06/24	29	97	CI around median	0.001	0.00480
G403	UA	E005	Sulfate, total	mg/L	11/23/15 - 05/06/24	30	0	CB around T-S line	61.7	370
G403	UA	E005	Thallium, total	mg/L	11/23/15 - 05/06/24	26	100	All ND - Last	0.002	0.001
G403	UA	E005	Total Dissolved Solids	mg/L	11/23/15 - 05/06/24	30	0	CB around linear reg	398	840
G404	UA	E005	Antimony, total	mg/L	11/21/15 - 05/06/24	26	96	CB around T-S line	0.00247	0.003

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G404	UA	E005	Arsenic, total	mg/L	11/21/15 - 05/06/24	29	87	CI around median	0.001	0.00660
G404	UA	E005	Barium, total	mg/L	11/21/15 - 05/06/24	29	0	CB around linear reg	0.0219	0.140
G404	UA	E005	Beryllium, total	mg/L	11/21/15 - 05/06/24	28	100	All ND - Last	0.001	0.001
G404	UA	E005	Boron, total	mg/L	11/21/15 - 05/06/24	30	0	CB around linear reg	6.36	0.0290
G404	UA	E005	Cadmium, total	mg/L	11/21/15 - 05/06/24	29	100	All ND - Last	0.001	0.001
G404	UA	E005	Chloride, total	mg/L	11/21/15 - 05/06/24	30	0	CB around linear reg	95.5	75.0
G404	UA	E005	Chromium, total	mg/L	11/21/15 - 05/06/24	29	97	CB around T-S line	0.00335	0.0190
G404	UA	E005	Cobalt, total	mg/L	11/21/15 - 05/06/24	29	93	CI around median	0.002	0.00590
G404	UA	E005	Fluoride, total	mg/L	11/21/15 - 05/06/24	30	71	CB around T-S line	0.211	0.513
G404	UA	E005	Lead, total	mg/L	11/21/15 - 05/06/24	28	97	CI around median	0.001	0.0120
G404	UA	E005	Lithium, total	mg/L	11/21/15 - 05/06/24	29	76	CI around median	0.01	0.0190
G404	UA	E005	Mercury, total	mg/L	11/21/15 - 05/06/24	28	100	All ND - Last	0.0002	0.0002
G404	UA	E005	Molybdenum, total	mg/L	11/21/15 - 05/06/24	29	100	All ND - Last	0.0015	0.00450
G404	UA	E005	pH (field)	SU	11/21/15 - 05/06/24	30	0	CB around linear reg	6.5/6.8	6.6/7.5
G404	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 05/06/24	29	0	CI around mean	0.592	1.89
G404	UA	E005	Selenium, total	mg/L	11/21/15 - 05/06/24	29	100	All ND - Last	0.001	0.00480
G404	UA	E005	Sulfate, total	mg/L	11/21/15 - 05/06/24	30	0	CB around linear reg	426	370
G404	UA	E005	Thallium, total	mg/L	11/21/15 - 05/06/24	26	100	All ND - Last	0.002	0.001
G404	UA	E005	Total Dissolved Solids	mg/L	11/21/15 - 05/06/24	30	0	CB around linear reg	1,170	840
G405	UA	E005	Antimony, total	mg/L	11/21/15 - 05/06/24	26	93	CB around T-S line	0.00233	0.003
G405	UA	E005	Arsenic, total	mg/L	11/21/15 - 05/06/24	29	33	CB around T-S line	-0.00194	0.00660
G405	UA	E005	Barium, total	mg/L	11/21/15 - 05/06/24	29	0	CB around linear reg	0.00761	0.140
G405	UA	E005	Beryllium, total	mg/L	11/21/15 - 05/06/24	28	100	All ND - Last	0.001	0.001
G405	UA	E005	Boron, total	mg/L	11/21/15 - 05/06/24	30	0	CI around mean	9.38	0.0290
G405	UA	E005	Cadmium, total	mg/L	11/21/15 - 05/06/24	29	97	CI around median	0.001	0.001
G405	UA	E005	Chloride, total	mg/L	11/21/15 - 05/06/24	30	0	CI around geomean	9.58	75.0
G405	UA	E005	Chromium, total	mg/L	11/21/15 - 05/06/24	29	90	CB around T-S line	0.0033	0.0190

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G405	UA	E005	Cobalt, total	mg/L	11/21/15 - 05/06/24	29	67	CB around T-S line	0.000972	0.00590
G405	UA	E005	Fluoride, total	mg/L	11/21/15 - 05/06/24	30	10	CB around linear reg	0.241	0.513
G405	UA	E005	Lead, total	mg/L	11/21/15 - 05/06/24	28	52	CB around T-S line	-0.000825	0.0120
G405	UA	E005	Lithium, total	mg/L	11/21/15 - 05/06/24	29	90	CI around median	0.01	0.0190
G405	UA	E005	Mercury, total	mg/L	11/21/15 - 05/06/24	28	100	All ND - Last	0.0002	0.0002
G405	UA	E005	Molybdenum, total	mg/L	11/21/15 - 05/06/24	29	43	CI around median	0.001	0.00450
G405	UA	E005	pH (field)	SU	11/21/15 - 05/06/24	30	0	CI around mean	6.8/7.0	6.6/7.5
G405	UA	E005	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 05/06/24	29	0	CI around median	0.541	1.89
G405	UA	E005	Selenium, total	mg/L	11/21/15 - 05/06/24	29	90	CI around median	0.001	0.00480
G405	UA	E005	Sulfate, total	mg/L	11/21/15 - 05/06/24	30	0	CB around linear reg	474	370
G405	UA	E005	Thallium, total	mg/L	11/21/15 - 05/06/24	26	100	All ND - Last	0.002	0.001
G405	UA	E005	Total Dissolved Solids	mg/L	11/21/15 - 05/06/24	30	0	CI around mean	1,550	840
G406	UA	E005	Antimony, total	mg/L	10/14/20 - 05/06/24	15	100	All ND - Last	0.001	0.003
G406	UA	E005	Arsenic, total	mg/L	10/14/20 - 05/06/24	15	93	CI around median	0.001	0.00660
G406	UA	E005	Barium, total	mg/L	10/14/20 - 05/06/24	15	0	CI around median	0.0124	0.140
G406	UA	E005	Beryllium, total	mg/L	10/14/20 - 05/06/24	15	100	All ND - Last	0.001	0.001
G406	UA	E005	Boron, total	mg/L	10/14/20 - 05/06/24	15	0	CI around median	1.4	0.0290
G406	UA	E005	Cadmium, total	mg/L	10/14/20 - 05/06/24	15	100	All ND - Last	0.001	0.001
G406	UA	E005	Chloride, total	mg/L	10/14/20 - 05/06/24	15	13	CI around mean	3.06	75.0
G406	UA	E005	Chromium, total	mg/L	10/14/20 - 05/06/24	15	93	CB around T-S line	0.00081	0.0190
G406	UA	E005	Cobalt, total	mg/L	10/14/20 - 05/06/24	15	100	All ND - Last	0.001	0.00590
G406	UA	E005	Fluoride, total	mg/L	10/14/20 - 05/06/24	15	13	CI around median	0.273	0.513
G406	UA	E005	Lead, total	mg/L	10/14/20 - 05/06/24	15	93	CI around median	0.001	0.0120
G406	UA	E005	Lithium, total	mg/L	10/14/20 - 05/06/24	15	73	CB around T-S line	0.0107	0.0190
G406	UA	E005	Mercury, total	mg/L	10/14/20 - 05/06/24	15	100	All ND - Last	0.0002	0.0002
G406	UA	E005	Molybdenum, total	mg/L	10/14/20 - 05/06/24	15	93	CI around median	0.001	0.00450
G406	UA	E005	pH (field)	SU	10/14/20 - 05/06/24	15	0	CI around mean	6.5/6.7	6.6/7.5

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G406	UA	E005	Radium 226 + Radium 228, total	pCi/L	10/14/20 - 05/06/24	15	0	CI around mean	0.272	1.89
G406	UA	E005	Selenium, total	mg/L	10/14/20 - 05/06/24	15	100	All ND - Last	0.001	0.00480
G406	UA	E005	Sulfate, total	mg/L	10/14/20 - 05/06/24	15	0	CI around median	450	370
G406	UA	E005	Thallium, total	mg/L	10/14/20 - 05/06/24	15	100	All ND - Last	0.002	0.001
G406	UA	E005	Total Dissolved Solids	mg/L	10/14/20 - 05/06/24	15	0	CI around mean	1,010	840
G407	UA	E005	Antimony, total	mg/L	10/14/20 - 04/29/24	15	100	All ND - Last	0.001	0.003
G407	UA	E005	Arsenic, total	mg/L	10/14/20 - 04/29/24	15	87	CI around median	0.001	0.00660
G407	UA	E005	Barium, total	mg/L	10/14/20 - 04/29/24	15	0	CI around median	0.0118	0.140
G407	UA	E005	Beryllium, total	mg/L	10/14/20 - 04/29/24	15	100	All ND - Last	0.001	0.001
G407	UA	E005	Boron, total	mg/L	10/14/20 - 04/29/24	15	0	CI around mean	0.0737	0.0290
G407	UA	E005	Cadmium, total	mg/L	10/14/20 - 04/29/24	15	100	All ND - Last	0.001	0.001
G407	UA	E005	Chloride, total	mg/L	10/14/20 - 04/29/24	15	0	CI around median	11	75.0
G407	UA	E005	Chromium, total	mg/L	10/14/20 - 04/29/24	15	80	CI around median	0.0015	0.0190
G407	UA	E005	Cobalt, total	mg/L	10/14/20 - 04/29/24	15	87	CI around median	0.001	0.00590
G407	UA	E005	Fluoride, total	mg/L	10/14/20 - 04/29/24	15	20	CI around geomean	0.268	0.513
G407	UA	E005	Lead, total	mg/L	10/14/20 - 04/29/24	15	93	CI around median	0.001	0.0120
G407	UA	E005	Lithium, total	mg/L	10/14/20 - 04/29/24	15	0	CI around median	0.038	0.0190
G407	UA	E005	Mercury, total	mg/L	10/14/20 - 04/29/24	15	100	All ND - Last	0.0002	0.0002
G407	UA	E005	Molybdenum, total	mg/L	10/14/20 - 04/29/24	15	20	CI around geomean	0.00107	0.00450
G407	UA	E005	pH (field)	SU	10/14/20 - 04/29/24	15	0	CI around mean	6.6/6.7	6.6/7.5
G407	UA	E005	Radium 226 + Radium 228, total	pCi/L	10/14/20 - 04/29/24	15	0	CI around mean	0.276	1.89
G407	UA	E005	Selenium, total	mg/L	10/14/20 - 04/29/24	15	100	All ND - Last	0.001	0.00480
G407	UA	E005	Sulfate, total	mg/L	10/14/20 - 04/29/24	15	0	CI around median	830	370
G407	UA	E005	Thallium, total	mg/L	10/14/20 - 04/29/24	15	100	All ND - Last	0.002	0.001
G407	UA	E005	Total Dissolved Solids	mg/L	10/14/20 - 04/29/24	15	0	CI around mean	1,910	840

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 2, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Notes:

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

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 B.
COMPARISON TO BACKGROUND - QUARTER 3, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G1001	LCU	E006	Antimony, total	mg/L	02/15/23 - 08/02/24	6	67	CI around median (Last Sample, n<7)	0.001	0.003
G1001	LCU	E006	Arsenic, total	mg/L	02/15/23 - 08/02/24	6	67	CI around median (Last Sample, n<7)	0.001	0.00660
G1001	LCU	E006	Barium, total	mg/L	02/15/23 - 08/02/24	6	0	CI around mean	0.00719	0.140
G1001	LCU	E006	Beryllium, total	mg/L	02/15/23 - 08/02/24	6	83	CI around median (Last Sample, n<7)	0.001	0.001
G1001	LCU	E006	Boron, total	mg/L	05/12/21 - 08/02/24	7	0	CI around mean	0.75	0.0290
G1001	LCU	E006	Cadmium, total	mg/L	02/15/23 - 08/02/24	6	100	All ND - Last	0.001	0.001
G1001	LCU	E006	Chloride, total	mg/L	05/12/21 - 08/02/24	7	0	CI around mean	7.45	75.0
G1001	LCU	E006	Chromium, total	mg/L	02/15/23 - 08/02/24	6	50	CI around geomean	0.000611	0.0190
G1001	LCU	E006	Cobalt, total	mg/L	05/12/21 - 08/02/24	7	71	CI around median	0.001	0.00590
G1001	LCU	E006	Fluoride, total	mg/L	02/15/23 - 08/02/24	6	50	CI around geomean	0.232	0.513
G1001	LCU	E006	Lead, total	mg/L	02/15/23 - 08/02/24	6	67	CI around median (Last Sample, n<7)	0.001	0.0120
G1001	LCU	E006	Lithium, total	mg/L	05/12/21 - 08/02/24	7	14	CI around mean	0.00356	0.0190
G1001	LCU	E006	Mercury, total	mg/L	02/15/23 - 08/02/24	6	100	All ND - Last	0.0002	0.0002
G1001	LCU	E006	Molybdenum, total	mg/L	02/15/23 - 08/02/24	6	0	CI around mean	0.0033	0.00450
G1001	LCU	E006	pH (field)	SU	02/15/23 - 08/02/24	6	0	CI around median (Last Sample, n<7)	7.0/7.0	6.6/7.5
G1001	LCU	E006	Radium 226 + Radium 228, total	pCi/L	02/15/23 - 08/02/24	6	0	CI around geomean	0.348	1.89
G1001	LCU	E006	Selenium, total	mg/L	02/15/23 - 08/02/24	6	83	CI around median (Last Sample, n<7)	0.001	0.00480
G1001	LCU	E006	Sulfate, total	mg/L	05/12/21 - 08/02/24	7	0	CI around mean	57.5	370
G1001	LCU	E006	Thallium, total	mg/L	02/15/23 - 08/02/24	6	100	All ND - Last	0.002	0.001
G1001	LCU	E006	Total Dissolved Solids	mg/L	02/15/23 - 08/02/24	6	0	CI around mean	508	840
G401	UA	E006	Antimony, total	mg/L	11/21/15 - 08/02/24	27	100	All ND - Last	0.001	0.003
G401	UA	E006	Arsenic, total	mg/L	11/21/15 - 08/02/24	30	50	CB around T-S line	-0.0162	0.00660
G401	UA	E006	Barium, total	mg/L	11/21/15 - 08/02/24	30	0	CB around T-S line	-0.165	0.140
G401	UA	E006	Beryllium, total	mg/L	11/21/15 - 08/02/24	29	83	CI around median	0.001	0.001
G401	UA	E006	Boron, total	mg/L	11/21/15 - 08/02/24	31	0	CI around median	3.6	0.0290
G401	UA	E006	Cadmium, total	mg/L	11/21/15 - 08/02/24	30	70	CB around T-S line	-0.00164	0.001
G401	UA	E006	Chloride, total	mg/L	11/21/15 - 08/02/24	31	13	CI around geomean	2.94	75.0

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 3, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G401	UA	E006	Chromium, total	mg/L	11/21/15 - 08/02/24	30	70	CB around T-S line	-0.0351	0.0190
G401	UA	E006	Cobalt, total	mg/L	11/21/15 - 08/02/24	30	0	CB around linear reg	0.0593	0.00590
G401	UA	E006	Fluoride, total	mg/L	11/21/15 - 08/02/24	31	84	CB around T-S line	0.25	0.513
G401	UA	E006	Lead, total	mg/L	11/21/15 - 08/02/24	29	69	CB around T-S line	-0.0245	0.0120
G401	UA	E006	Lithium, total	mg/L	11/21/15 - 08/02/24	32	3	CB around T-S line	-0.00457	0.0190
G401	UA	E006	Mercury, total	mg/L	11/21/15 - 08/02/24	29	83	CI around median	0.0002	0.0002
G401	UA	E006	Molybdenum, total	mg/L	11/21/15 - 08/02/24	30	73	CI around median	0.001	0.00450
G401	UA	E006	pH (field)	SU	11/21/15 - 08/02/24	33	0	CI around mean	5.9/6.1	6.6/7.5
G401	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 08/02/24	30	0	CB around T-S line	-0.0718	1.89
G401	UA	E006	Selenium, total	mg/L	11/21/15 - 08/02/24	30	67	CB around T-S line	-0.00151	0.00480
G401	UA	E006	Sulfate, total	mg/L	11/21/15 - 08/02/24	31	0	CB around T-S line	1,330	370
G401	UA	E006	Thallium, total	mg/L	11/21/15 - 08/02/24	27	100	All ND - Last	0.002	0.001
G401	UA	E006	Total Dissolved Solids	mg/L	11/21/15 - 08/02/24	31	0	CI around median	2,800	840
G402	UA	E006	Antimony, total	mg/L	11/21/15 - 08/01/24	27	100	All ND - Last	0.001	0.003
G402	UA	E006	Arsenic, total	mg/L	11/21/15 - 08/01/24	30	0	CB around linear reg	-0.00482	0.00660
G402	UA	E006	Barium, total	mg/L	11/21/15 - 08/01/24	30	0	CB around linear reg	-0.000928	0.140
G402	UA	E006	Beryllium, total	mg/L	11/21/15 - 08/01/24	29	100	All ND - Last	0.001	0.001
G402	UA	E006	Boron, total	mg/L	11/21/15 - 08/01/24	31	0	CB around T-S line	4.41	0.0290
G402	UA	E006	Cadmium, total	mg/L	11/21/15 - 08/01/24	30	97	Most recent sample	0.001	0.001
G402	UA	E006	Chloride, total	mg/L	11/21/15 - 08/01/24	31	29	CI around mean	1.61	75.0
G402	UA	E006	Chromium, total	mg/L	11/21/15 - 08/01/24	30	40	CB around T-S line	-0.00516	0.0190
G402	UA	E006	Cobalt, total	mg/L	11/21/15 - 08/01/24	30	20	CB around linear reg	-0.00286	0.00590
G402	UA	E006	Fluoride, total	mg/L	11/21/15 - 08/01/24	31	16	CI around geomean	0.294	0.513
G402	UA	E006	Lead, total	mg/L	11/21/15 - 08/01/24	29	31	CB around linear reg	-0.00392	0.0120
G402	UA	E006	Lithium, total	mg/L	11/21/15 - 08/01/24	30	3	CB around linear reg	0.0116	0.0190
G402	UA	E006	Mercury, total	mg/L	11/21/15 - 08/01/24	29	100	All ND - Last	0.0002	0.0002
G402	UA	E006	Molybdenum, total	mg/L	11/21/15 - 08/01/24	30	0	CB around linear reg	0.00103	0.00450

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 3, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G402	UA	E006	pH (field)	SU	11/21/15 - 08/01/24	31	0	CB around linear reg	6.8/7.0	6.6/7.5
G402	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 08/01/24	30	0	CI around median	0.547	1.89
G402	UA	E006	Selenium, total	mg/L	11/21/15 - 08/01/24	30	80	CB around T-S line	0.000668	0.00480
G402	UA	E006	Sulfate, total	mg/L	11/21/15 - 08/01/24	31	0	CB around T-S line	330	370
G402	UA	E006	Thallium, total	mg/L	11/21/15 - 08/01/24	27	100	All ND - Last	0.002	0.001
G402	UA	E006	Total Dissolved Solids	mg/L	11/21/15 - 08/01/24	31	0	CB around linear reg	1,260	840
G403	UA	E006	Antimony, total	mg/L	11/23/15 - 08/01/24	27	100	All ND - Last	0.001	0.003
G403	UA	E006	Arsenic, total	mg/L	11/23/15 - 08/01/24	30	63	CB around T-S line	0.000155	0.00660
G403	UA	E006	Barium, total	mg/L	11/23/15 - 08/01/24	30	0	CB around T-S line	0.0841	0.140
G403	UA	E006	Beryllium, total	mg/L	11/23/15 - 08/01/24	29	100	All ND - Last	0.001	0.001
G403	UA	E006	Boron, total	mg/L	11/23/15 - 08/01/24	31	19	CI around geomean	0.0157	0.0290
G403	UA	E006	Cadmium, total	mg/L	11/23/15 - 08/01/24	30	100	All ND - Last	0.001	0.001
G403	UA	E006	Chloride, total	mg/L	11/23/15 - 08/01/24	31	0	CB around linear reg	4.83	75.0
G403	UA	E006	Chromium, total	mg/L	11/23/15 - 08/01/24	30	93	CB around T-S line	0.00193	0.0190
G403	UA	E006	Cobalt, total	mg/L	11/23/15 - 08/01/24	30	60	CI around median	0.002	0.00590
G403	UA	E006	Fluoride, total	mg/L	11/23/15 - 08/01/24	31	13	CB around T-S line	0.21	0.513
G403	UA	E006	Lead, total	mg/L	11/23/15 - 08/01/24	29	90	CI around median	0.001	0.0120
G403	UA	E006	Lithium, total	mg/L	11/23/15 - 08/01/24	30	87	CI around median	0.01	0.0190
G403	UA	E006	Mercury, total	mg/L	11/23/15 - 08/01/24	29	100	All ND - Last	0.0002	0.0002
G403	UA	E006	Molybdenum, total	mg/L	11/23/15 - 08/01/24	30	77	CI around median	0.001	0.00450
G403	UA	E006	pH (field)	SU	11/23/15 - 08/01/24	31	0	CI around mean	6.8/7.0	6.6/7.5
G403	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/23/15 - 08/01/24	30	0	CI around mean	0.604	1.89
G403	UA	E006	Selenium, total	mg/L	11/23/15 - 08/01/24	30	97	CI around median	0.001	0.00480
G403	UA	E006	Sulfate, total	mg/L	11/23/15 - 08/01/24	31	0	CB around T-S line	63.1	370
G403	UA	E006	Thallium, total	mg/L	11/23/15 - 08/01/24	27	100	All ND - Last	0.002	0.001
G403	UA	E006	Total Dissolved Solids	mg/L	11/23/15 - 08/01/24	31	0	CB around linear reg	403	840
G404	UA	E006	Antimony, total	mg/L	11/21/15 - 07/31/24	27	96	CB around T-S line	0.00233	0.003

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 3, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G404	UA	E006	Arsenic, total	mg/L	11/21/15 - 07/31/24	30	87	CI around median	0.001	0.00660
G404	UA	E006	Barium, total	mg/L	11/21/15 - 07/31/24	30	0	CB around linear reg	0.0226	0.140
G404	UA	E006	Beryllium, total	mg/L	11/21/15 - 07/31/24	29	100	All ND - Last	0.001	0.001
G404	UA	E006	Boron, total	mg/L	11/21/15 - 07/31/24	31	0	CB around T-S line	4.32	0.0290
G404	UA	E006	Cadmium, total	mg/L	11/21/15 - 07/31/24	30	100	All ND - Last	0.001	0.001
G404	UA	E006	Chloride, total	mg/L	11/21/15 - 07/31/24	31	0	CI around median	64	75.0
G404	UA	E006	Chromium, total	mg/L	11/21/15 - 07/31/24	30	97	CB around T-S line	0.00338	0.0190
G404	UA	E006	Cobalt, total	mg/L	11/21/15 - 07/31/24	30	94	CI around median	0.002	0.00590
G404	UA	E006	Fluoride, total	mg/L	11/21/15 - 07/31/24	31	72	CI around median	0.25	0.513
G404	UA	E006	Lead, total	mg/L	11/21/15 - 07/31/24	29	97	CI around median	0.001	0.0120
G404	UA	E006	Lithium, total	mg/L	11/21/15 - 07/31/24	30	73	CI around median	0.01	0.0190
G404	UA	E006	Mercury, total	mg/L	11/21/15 - 07/31/24	29	100	All ND - Last	0.0002	0.0002
G404	UA	E006	Molybdenum, total	mg/L	11/21/15 - 07/31/24	30	97	CB around T-S line	0.001	0.00450
G404	UA	E006	pH (field)	SU	11/21/15 - 07/31/24	31	0	CB around linear reg	6.5/6.8	6.6/7.5
G404	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 07/31/24	30	0	CI around mean	0.587	1.89
G404	UA	E006	Selenium, total	mg/L	11/21/15 - 07/31/24	30	100	All ND - Last	0.001	0.00480
G404	UA	E006	Sulfate, total	mg/L	11/21/15 - 07/31/24	31	0	CB around linear reg	414	370
G404	UA	E006	Thallium, total	mg/L	11/21/15 - 07/31/24	27	100	All ND - Last	0.002	0.001
G404	UA	E006	Total Dissolved Solids	mg/L	11/21/15 - 07/31/24	31	0	CB around linear reg	1,140	840
G405	UA	E006	Antimony, total	mg/L	11/21/15 - 07/31/24	27	93	CB around T-S line	0.00218	0.003
G405	UA	E006	Arsenic, total	mg/L	11/21/15 - 07/31/24	30	36	CB around T-S line	-0.00184	0.00660
G405	UA	E006	Barium, total	mg/L	11/21/15 - 07/31/24	30	0	CB around linear reg	0.0074	0.140
G405	UA	E006	Beryllium, total	mg/L	11/21/15 - 07/31/24	29	100	All ND - Last	0.001	0.001
G405	UA	E006	Boron, total	mg/L	11/21/15 - 07/31/24	31	0	CI around mean	9.4	0.0290
G405	UA	E006	Cadmium, total	mg/L	11/21/15 - 07/31/24	30	97	CI around median	0.001	0.001
G405	UA	E006	Chloride, total	mg/L	11/21/15 - 07/31/24	31	0	CI around geomean	9.81	75.0
G405	UA	E006	Chromium, total	mg/L	11/21/15 - 07/31/24	30	90	CB around T-S line	0.00302	0.0190

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 3, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G405	UA	E006	Cobalt, total	mg/L	11/21/15 - 07/31/24	30	68	CB around T-S line	0.000991	0.00590
G405	UA	E006	Fluoride, total	mg/L	11/21/15 - 07/31/24	31	12	CB around linear reg	0.228	0.513
G405	UA	E006	Lead, total	mg/L	11/21/15 - 07/31/24	29	53	CB around T-S line	-0.00037	0.0120
G405	UA	E006	Lithium, total	mg/L	11/21/15 - 07/31/24	30	87	CI around median	0.01	0.0190
G405	UA	E006	Mercury, total	mg/L	11/21/15 - 07/31/24	29	100	All ND - Last	0.0002	0.0002
G405	UA	E006	Molybdenum, total	mg/L	11/21/15 - 07/31/24	30	45	CI around median	0.001	0.00450
G405	UA	E006	pH (field)	SU	11/21/15 - 07/31/24	31	0	CI around mean	6.8/7.0	6.6/7.5
G405	UA	E006	Radium 226 + Radium 228, total	pCi/L	11/21/15 - 07/31/24	30	0	CI around median	0.541	1.89
G405	UA	E006	Selenium, total	mg/L	11/21/15 - 07/31/24	30	90	CI around median	0.001	0.00480
G405	UA	E006	Sulfate, total	mg/L	11/21/15 - 07/31/24	31	0	CB around linear reg	488	370
G405	UA	E006	Thallium, total	mg/L	11/21/15 - 07/31/24	27	100	All ND - Last	0.002	0.001
G405	UA	E006	Total Dissolved Solids	mg/L	11/21/15 - 07/31/24	31	0	CI around mean	1,550	840
G406	UA	E006	Antimony, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.003
G406	UA	E006	Arsenic, total	mg/L	10/14/20 - 08/01/24	16	94	CI around median	0.001	0.00660
G406	UA	E006	Barium, total	mg/L	10/14/20 - 08/01/24	16	0	CI around median	0.0128	0.140
G406	UA	E006	Beryllium, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.001
G406	UA	E006	Boron, total	mg/L	10/14/20 - 08/01/24	16	0	CI around median	1.4	0.0290
G406	UA	E006	Cadmium, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.001
G406	UA	E006	Chloride, total	mg/L	10/14/20 - 08/01/24	16	12	CI around mean	3.12	75.0
G406	UA	E006	Chromium, total	mg/L	10/14/20 - 08/01/24	16	94	CB around T-S line	0.000569	0.0190
G406	UA	E006	Cobalt, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.00590
G406	UA	E006	Fluoride, total	mg/L	10/14/20 - 08/01/24	16	19	CI around geomean	0.279	0.513
G406	UA	E006	Lead, total	mg/L	10/14/20 - 08/01/24	16	94	CI around median	0.001	0.0120
G406	UA	E006	Lithium, total	mg/L	10/14/20 - 08/01/24	16	69	CB around T-S line	0.00783	0.0190
G406	UA	E006	Mercury, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.0002	0.0002
G406	UA	E006	Molybdenum, total	mg/L	10/14/20 - 08/01/24	16	94	CI around median	0.001	0.00450
G406	UA	E006	pH (field)	SU	10/14/20 - 08/01/24	16	0	CI around mean	6.5/6.7	6.6/7.5

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 3, 2024

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G406	UA	E006	Radium 226 + Radium 228, total	pCi/L	10/14/20 - 08/01/24	16	0	CI around mean	0.302	1.89
G406	UA	E006	Selenium, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.00480
G406	UA	E006	Sulfate, total	mg/L	10/14/20 - 08/01/24	16	0	CI around median	470	370
G406	UA	E006	Thallium, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.002	0.001
G406	UA	E006	Total Dissolved Solids	mg/L	10/14/20 - 08/01/24	16	0	CI around mean	1,020	840
G407	UA	E006	Antimony, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.003
G407	UA	E006	Arsenic, total	mg/L	10/14/20 - 08/01/24	16	88	CI around median	0.001	0.00660
G407	UA	E006	Barium, total	mg/L	10/14/20 - 08/01/24	16	0	CI around median	0.012	0.140
G407	UA	E006	Beryllium, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.001
G407	UA	E006	Boron, total	mg/L	10/14/20 - 08/01/24	16	0	CI around mean	0.0741	0.0290
G407	UA	E006	Cadmium, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.001
G407	UA	E006	Chloride, total	mg/L	10/14/20 - 08/01/24	16	0	CI around median	11	75.0
G407	UA	E006	Chromium, total	mg/L	10/14/20 - 08/01/24	16	75	CI around median	0.0016	0.0190
G407	UA	E006	Cobalt, total	mg/L	10/14/20 - 08/01/24	16	88	CB around T-S line	0.000295	0.00590
G407	UA	E006	Fluoride, total	mg/L	10/14/20 - 08/01/24	16	25	CI around median	0.272	0.513
G407	UA	E006	Lead, total	mg/L	10/14/20 - 08/01/24	16	94	CI around median	0.001	0.0120
G407	UA	E006	Lithium, total	mg/L	10/14/20 - 08/01/24	16	0	CI around median	0.038	0.0190
G407	UA	E006	Mercury, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.0002	0.0002
G407	UA	E006	Molybdenum, total	mg/L	10/14/20 - 08/01/24	16	19	CI around geomean	0.00108	0.00450
G407	UA	E006	pH (field)	SU	10/14/20 - 08/01/24	16	0	CI around mean	6.6/6.7	6.6/7.5
G407	UA	E006	Radium 226 + Radium 228, total	pCi/L	10/14/20 - 08/01/24	16	0	CI around geomean	0.239	1.89
G407	UA	E006	Selenium, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.001	0.00480
G407	UA	E006	Sulfate, total	mg/L	10/14/20 - 08/01/24	16	0	CI around median	950	370
G407	UA	E006	Thallium, total	mg/L	10/14/20 - 08/01/24	16	100	All ND - Last	0.002	0.001
G407	UA	E006	Total Dissolved Solids	mg/L	10/14/20 - 08/01/24	16	0	CI around mean	1,900	840

**ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 3, 2024**

845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 2
COFFEEN, IL

Notes:

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

HSU = hydrostratigraphic unit:

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