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

January 30, 2024

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

Re: Coffeen Ash Pond No. 1 (IEPA ID: W1350150004-01) 2023 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. 1 (IEPA ID: W1350150004-01), as enclosed.

Sincerely,

Dianna Tickner
Sr. Director Decommissioning & Demolition

Enclosures

Annual Consolidated Report
Illinois Power Generating Company
Coffeen Power Plant
Ash Pond No. 1; IEPA **ID: W1350150004-01**

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 2023

Reporting Year: 4th Quarter 2022 through 3rd Quarter 2023

Approved by:  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.

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 10/2/2023
Operator Name / Address	Luminant Generation Company LLC 6555 Sierra Drive, Irving, TX 75039
CCR unit	Ash Pond No. 1

INSPECTION REPORT 35 IAC § 845.540	
(b)(1)(D) The annual hazard potential classification certification, if applicable (see Section 845.440).	Based on a review of the CCR unit's annual hazard potential classification, the unit is classified as a Class II CCR surface impoundment.
(b)(2)(A) Any changes in geometry of the structure since the previous annual inspection.	Based on a review of the CCR unit's records and visual observation during the on-site inspection, no changes in geometry of the structure have taken place since the previous annual inspection.
(b)(2)(B) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection	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	Approximately 900 acre-feet – Coffeen Power Station closed in early 2020.
(b)(2)(E) The approximate volume of the impounded water and CCR contained in the unit at the time of the inspection.	Approximately 800 acre-feet – Coffeen Power Station was closed in early 2020.
(b)(2)(F) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit	Based on a review of the CCR unit's records and visual observation during the on-site inspection, there was no appearance of an actual or potential structural weakness of the CCR unit, nor an existing condition that is disrupting or would disrupt the operation and safety of the unit.

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

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

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

James Knutelski, PE
Illinois PE No. 062-054206, Expires: 11/30/2025
Date: 1/07/2024

Site Name: Coffeen Power Station
CCR Unit: Ash Pond No. 1

35 IAC § 845.540 (b)(2)(B)		
Instrument ID #	Type	Maximum recorded reading since previous annual inspection (ft)
P000	Piezometer	617.83'
P001	Piezometer	614.13'
P002	Piezometer	625.72'
P003	Piezometer	621.04'
P005	Piezometer	623.41'
P006	Piezometer	610.80'
P007	Piezometer	614.77'
P008	Piezometer	623.19'

35 IAC § 845.540 (b)(2)(C)						
	Approximate Depth / Elevation					
Since previous inspection:	Elevation (ft)			Depth (ft)		
	Minimum	Present	Maximum	Minimum	Present	Maximum
Impounded Water		628.8			3	
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, 2024

Project No.
1940103649-003

2023 35 I.A.C. § 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ASH POND NO. 1
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

IEPA ID NO. W1350150004-01

RAMBOLL Bright ideas. Sustainable change.

2023 35 I.A.C. § 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
COFFEEN POWER PLANT ASH POND NO. 1

Project name	**Coffeen Power Plant Ash Pond No. 1**
Project no.	**1940103649-003**
Recipient	**Illinois Power Generating Company**
Document type	**Annual Groundwater Monitoring and Corrective Action Report**
Version	**FINAL**
Date	**January 31, 2024**
Prepared by	**Kristen L. Theesfeld**
Checked by	**Lauren D. Cook**
Approved by	**Brian G. Hennings, PG**
Description	**Annual Report required by 35 I.A.C. § 845**

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Kristen L. Theesfeld
Hydrogeologist

Brian G. Hennings, PG
Project Officer, Hydrogeology

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ATTACHMENTS

ACRONYMS AND ABBREVIATIONS

35 I.A.C.	Title 35 of the Illinois Administrative Code
AP1	Ash Pond No. 1
ASD	Alternative Source Demonstration
CCA	compliance commitment agreement
CCR	coal combustion residuals
CMA	assessment of corrective measures
CPP	Coffeen Power Plant
E001	Quarter 2, 2023 sampling event
E002	Quarter 3, 2023 sampling event
E003	Quarter 4, 2023 sampling event
GWPS	groundwater protection standard
ID	identification
IEPA	Illinois Environmental Protection Agency
IPGC	Illinois Power Generating Company
NID	National Inventory of Dams
No.	number
Ramboll	Ramboll Americas Engineering Solutions, Inc.
SI	surface impoundment
SSI	statistically significant increase
TDS	Total Dissolved Solids

EXECUTIVE SUMMARY

This report has been prepared to provide the information required by Title 35 of the Illinois Administrative Code (35 I.A.C.) § 845.610(e) (*Annual Groundwater Monitoring and Corrective Action Report*) for Ash Pond Number (No.) 1 (AP1) located at Coffeen Power Plant (CPP) near Coffeen, Illinois. AP1 is recognized by coal combustion residuals (CCR) unit identification (ID) No. 101, Illinois Environmental Protection Agency (IEPA) ID No. W1350150004-01, and National Inventory of Dams (NID) No. IL50722.

As required by 35 I.A.C. § 845, an operating permit application for AP1 was submitted by Illinois Power Generating Company (IPGC) to IEPA by October 31, 2021 in accordance with the requirements specified in 35 I.A.C. § 845.230(d) and is pending approval. IPGC entered into a compliance commitment agreement (CCA) with IEPA on December 28, 2022. As specified in the CCA, groundwater monitoring in accordance with the proposed groundwater monitoring plan and sampling methodologies provided in the operating permit application for AP1 commenced in the second quarter of 2023. All available groundwater monitoring data collected in 2023 is summarized in **Table 1** (field parameters and analytical results) and **Attachment A** (groundwater elevation data)[1]. After AP1 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]), statistically derived values for constituent concentrations observed at compliance monitoring wells were compared with the groundwater protection standards (GWPSs) described in 35 I.A.C. § 845.600 to determine exceedances of the GWPS (**Table 2**). The following GWPS exceedances were determined in 2023[2]:

- Boron in G313
- Sulfate in G301, G303, G305, G307, G307D, G308, G310, G312, G313, G314, G314D, and G316
- Total Dissolved Solids (TDS) in G303, G305, G308, G312, G313, G314, G314D, G315, and G316

An Alternative Source Demonstration (ASD) was not completed for the GWPS exceedances listed above; these exceedances will be addressed in accordance with 35 I.A.C. § 845.660. The assessment of corrective measures (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 (**Attachment B**). Because the CMA is in progress, a remedy has not yet been selected under 35 I.A.C. § 845.670 and remedial activities have not been initiated under 35 I.A.C. § 845.780 in 2023.

[1] Analytical data received after December 31, 2023 will be reported in the Quarter 4, 2023 Groundwater Monitoring Data and Detected Exceedances Report.

[2] GWPS exceedances determined after January 31, 2024 will be reported in the Quarter 4, 2023 Groundwater Monitoring Data and Detected Exceedances Report.

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

1. INTRODUCTION

This report has been prepared by Ramboll Americas Engineering Solutions, Inc. (Ramboll) on behalf of IPGC, to provide the information required by 35 I.A.C. § 845.610(e) for AP1 located at CPP near Coffeen, Illinois. The owner or operator of a CCR surface impoundment (SI) must prepare and submit to IEPA by January 31st of each year an Annual Groundwater Monitoring and Corrective Action Report for the preceding calendar year as part of the Annual Consolidated Report required by 35 I.A.C. § 845.550. The Annual Groundwater Monitoring and Corrective Action Report shall document the status of the groundwater monitoring and corrective action plan for the CCR SI (**Section 2**), summarize key actions completed, including the status of permit applications and Agency approvals (**Section 3**), describe any problems encountered and actions to resolve the problems (**Section 4**), and project key activities for the upcoming year (**Section 5**).

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

A. A map, aerial image, or diagram showing the CCR SI and all background (or upgradient) and [downgradient] compliance monitoring wells, including the well identification numbers, that are part of the groundwater monitoring program for the CCR SI (**Figure 1**) and a visual delineation of any exceedances of the [groundwater protection standard] GWPS (**Figures 2, 3, and 4**).

B. Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken (**Section 3**, paragraph 1).

C. A potentiometric surface map for each groundwater elevation sampling event required by 35 I.A.C. § 845.650(b)(2) (**Figures 5 through 13**).

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 well, and the dates the samples were collected (**Section 3.1** and **Table A**).

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

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

A section at the beginning of the annual report that provides 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 AP1 for calendar year 2023.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

An operating permit application for AP1 was submitted by IPGC to IEPA by October 31, 2021 in accordance with the requirements specified in 35 I.A.C. § 845.230(d) and is pending approval. IPGC entered into a CCA with IEPA on December 28, 2022. The CCA required that groundwater monitoring in accordance with the proposed groundwater monitoring plan and sampling methodologies provided in the operating permit application for AP1 commenced in the second quarter of 2023. After AP1 has been issued an approved operating permit, groundwater monitoring shall be conducted in accordance with that operating permit. As specified in the CCA, groundwater sampling requirements that apply to the CCR SI under other existing permit programs will become void upon issuance of an approved operating permit pursuant to 35 I.A.C § 845.

A construction permit application for AP1 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** and **Section 3.2**, GWPS exceedances were determined for AP1 in 2023. An ASD was not completed for these GWPS exceedances; they will be addressed in accordance with 35 I.A.C. § 845.660. The 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 (**Attachment B**). Because the CMA is in progress, a remedy has not yet been selected under 35 I.A.C. § 845.670 and remedial activities have not been initiated under 35 I.A.C. § 845.780 in 2023.

3. KEY ACTIONS COMPLETED IN 2023

The proposed 35 I.A.C. § 845 monitoring system is presented in **Figure 1**. No wells were installed or decommissioned in 2023.

Monitoring well inspections and redevelopment of the monitoring wells that were not sampled in 2022 were also completed prior to initiating groundwater monitoring in the second quarter of 2023.

Pressure transducers equipped with data loggers were deployed in monitoring system monitoring wells for measurement of monthly water level elevations as required by 35 I.A.C. § 845.650(b)(2). **Attachment A** summarizes the groundwater elevation data collected in 2023. Potentiometric surfaces for April through December 2023 are included in **Figures 5 through 13**.

A summary of the samples collected in 2023 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 beginning in the second quarter of 2023.[3] 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 2023 is included in **Table A** on the following page. **Table 1** is a summary of the field parameters and analytical results from the 2023 sampling events. Laboratory analytical reports and field data sheets were provided in the quarterly Groundwater Monitoring Data and Detected Exceedances Reports for Quarter 2 and Quarter 3 (Ramboll, 2023a; Ramboll, 2023b); 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, 2023 will be reported in the Quarter 4, 2023 Groundwater Monitoring Data and Detected Exceedances Report.

[3] The bladder pump installed in compliance monitoring well G307 was indicated as non-functional during August 2023 and no groundwater sample was collected.
Compliance monitoring well G312 was indicated as dry during November 2023 and no groundwater sample was collected.

Table A. 35 I.A.C. § 845 Monitoring Program Summary for 2023

Event ID	Sampling Dates [1, 2, 3]	Analytical Data Receipt Date [4]	Exceedance Determination Date [4]	ASD Completion Date	Required CMA Initiation Date [5]
E001	May 31, 2023 and June 1 and 5-8, 2023	August 17, 2023	October 16, 2023	NA	January 14, 2024
E002 [6]	August 9-10 and 14, 2023	November 21, 2023	January 20, 2024	TBD	NA
E003 [7]	November 17-21, 2023	January 10, 2024	TBD	TBD	NA

Notes:

ASD: Alternative Source Demonstration

CMA: assessment of corrective measures

NA: not applicable

TBD: to be determined in 2024

[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: G281 and G306

[3] The following compliance wells were sampled for each event: G301, G302, G303, G305, G307, G307D, G308, G310, G312, G313, G314, G314D, G315, and G316

[4] Analytical data received after December 31, 2023 and GWPS exceedances determined after January 31, 2024 will be reported in the Quarter 4, 2023 Groundwater Monitoring Data and Detected Exceedances Report.

[5] Exceedances for events E002 and E003 may be incorporated into the CMA initiated after event E001 on a case by case basis, as opposed to generating a new CMA.

[6] The bladder pump installed in compliance monitoring well G307 was indicated as non-functional during August 2023 and no groundwater sample was collected.

[7] Compliance monitoring well G312 was indicated as dry during November 2023 and no groundwater sample was collected.

3.2 Exceedances of GWPS

In accordance with 35 I.A.C. § 845.610(b)(3)(C), the statistically derived values 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 statistical exceedances of the GWPSs were determined and are shown on **Figures 2, 3, and 4**[4]:

- Boron in G313
- Sulfate in G301, G303, G305, G307, G307D, G308, G310, G312, G313, G314, G314D, and G316
- TDS in G303, G305, G308, G312, G313, G314, G314D, G315, and G316

As allowed in 35 I.A.C. § 845.650(e), an ASD was evaluated for the detected exceedances of the GWPS summarized above.

An ASD was not completed. The exceedances listed above will be addressed in accordance with 35 I.A.C. § 845.660. The 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. Because the CMA is in progress, a remedy was not selected under 35 I.A.C. § 845.670 and remedial activities have not been initiated under 35 I.A.C. § 845.780 in 2023.

3.3 Exceedances of Background

In accordance with 35 I.A.C. § 845.610(b)(3)(B), groundwater monitoring data were evaluated for statistical exceedances over background levels for the constituents listed in 35 I.A.C. § 845.600. **Attachment C** shows the statistically derived values compared to background levels.

[4] GWPS exceedances determined after January 31, 2024 will be reported in the Quarter 4, 2023 Groundwater Monitoring Data and Detected Exceedances Report.

4. PROBLEMS ENCOUNTERED AND ACTIONS TO RESOLVE THE PROBLEMS

Groundwater monitoring commenced in the second quarter of 2023. 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 AP1 has been issued an approved operating permit, groundwater monitoring shall be conducted in accordance with that operating permit.

Due to malfunctioning pressure transducers, data gaps exist in monthly water level elevations prior to the fourth quarter. Monthly depth to water measurements were collected manually in the fourth quarter. Pressure transducers were refurbished and were redeployed in December 2023.

5. KEY ACTIVITIES PLANNED FOR 2024

The following key activities are planned for 2024:

- Continuation of groundwater monitoring in accordance with the proposed groundwater monitoring plan and sampling methodologies provided in the operating permit application for AP1. After AP1 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 2024 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 (*i.e.,* assessment of corrective measures) will be met.
- The CMA process will continue in accordance with 35 I.A.C. § 845.660 in 2024. A CMA extension request was submitted to IEPA January 15, 2024 and approved on January 17, 2024. The CMA will be submitted to IEPA on or before June 12, 2024.

6. REFERENCES

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

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2021. *Groundwater Monitoring Plan.* Coffeen Power Plant, Ash Pond No. 1, Coffeen, Illinois. Illinois Power Generating Company. October 25, 2021.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2023. 35 I.A.C. § 845.610(B)(3)(D) Groundwater Monitoring Data and Detected Exceedances, 2023 Quarter 2, Ash Pond No. 1, Coffeen Power Plant, Coffeen, Illinois. October 16, 2023.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2024. 35 I.A.C. § 845.610(B)(3)(D) Groundwater Monitoring Data and Detected Exceedances, 2024 Quarter 3, Ash Pond No. 1, Coffeen Power Plant, Coffeen, Illinois. January 20, 2024.

TABLES

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G281	Background	E001	06/08/2023	Antimony, total	0.00043 U	mg/L
G281	Background	E001	06/08/2023	Arsenic, total	0.00093 J	mg/L
G281	Background	E001	06/08/2023	Barium, total	0.0710	mg/L
G281	Background	E001	06/08/2023	Beryllium, total	0.00059 U	mg/L
G281	Background	E001	06/08/2023	Boron, total	0.0071 U	mg/L
G281	Background	E001	06/08/2023	Cadmium, total	0.00074 U	mg/L
G281	Background	E001	06/08/2023	Calcium, total	130	mg/L
G281	Background	E001	06/08/2023	Chloride, total	75.0	mg/L
G281	Background	E001	06/08/2023	Chromium, total	0.0028 U	mg/L
G281	Background	E001	06/08/2023	Cobalt, total	0.00099 J	mg/L
G281	Background	E001	06/08/2023	Dissolved Oxygen	0.950	mg/L
G281	Background	E001	06/08/2023	Fluoride, total	0.253	mg/L
G281	Background	E001	06/08/2023	Lead, total	0.00053 J	mg/L
G281	Background	E001	06/08/2023	Lithium, total	0.005 U	mg/L
G281	Background	E001	06/08/2023	Mercury, total	0.00014 U	mg/L
G281	Background	E001	06/08/2023	Molybdenum, total	0.00074 U	mg/L
G281	Background	E001	06/08/2023	Oxidation Reduction Potential	11.0	mV
G281	Background	E001	06/08/2023	pH (field)	6.8	SU
G281	Background	E001	06/08/2023	Radium 226 + Radium 228, total	0	pCi/L
G281	Background	E001	06/08/2023	Selenium, total	0.00074 U	mg/L
G281	Background	E001	06/08/2023	Specific Conductance @ 25C (field)	1,350	micromhos/cm
G281	Background	E001	06/08/2023	Sulfate, total	140	mg/L
G281	Background	E001	06/08/2023	Temperature	18.4	degrees C
G281	Background	E001	06/08/2023	Thallium, total	0.00038 U	mg/L
G281	Background	E001	06/08/2023	Total Dissolved Solids	1,000	mg/L
G281	Background	E001	06/08/2023	Turbidity, field	35.6	NTU
G306	Background	E001	06/05/2023	Antimony, total	0.00043 U	mg/L
G306	Background	E001	06/05/2023	Arsenic, total	0.00069 U	mg/L
G306	Background	E001	06/05/2023	Barium, total	0.0410	mg/L
G306	Background	E001	06/05/2023	Beryllium, total	0.00059 U	mg/L
G306	Background	E001	06/05/2023	Boron, total	2.40	mg/L
G306	Background	E001	06/05/2023	Cadmium, total	0.00074 U	mg/L
G306	Background	E001	06/05/2023	Calcium, total	110	mg/L
G306	Background	E001	06/05/2023	Chloride, total	0.96 U	mg/L
G306	Background	E001	06/05/2023	Chromium, total	0.0037 J	mg/L
G306	Background	E001	06/05/2023	Cobalt, total	0.00048 U	mg/L
G306	Background	E001	06/05/2023	Dissolved Oxygen	2.00	mg/L
G306	Background	E001	06/05/2023	Fluoride, total	0.203 J	mg/L
G306	Background	E001	06/05/2023	Lead, total	0.00051 J	mg/L
G306	Background	E001	06/05/2023	Lithium, total	0.005 U	mg/L
G306	Background	E001	06/05/2023	Mercury, total	0.00014 U	mg/L
G306	Background	E001	06/05/2023	Molybdenum, total	0.00074 U	mg/L
G306	Background	E001	06/05/2023	Oxidation Reduction Potential	115	mV
G306	Background	E001	06/05/2023	pH (field)	6.9	SU
G306	Background	E001	06/05/2023	Radium 226 + Radium 228, total	0.09	pCi/L
G306	Background	E001	06/05/2023	Selenium, total	0.00074 U	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2023
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G306	Background	E001	06/05/2023	Specific Conductance @ 25C (field)	953	micromhos/cm
G306	Background	E001	06/05/2023	Sulfate, total	130	mg/L
G306	Background	E001	06/05/2023	Temperature	16.8	degrees C
G306	Background	E001	06/05/2023	Thallium, total	0.00038 U	mg/L
G306	Background	E001	06/05/2023	Total Dissolved Solids	520	mg/L
G306	Background	E001	06/05/2023	Turbidity, field	280	NTU
G301	Compliance	E001	06/06/2023	Antimony, total	0.00043 U	mg/L
G301	Compliance	E001	06/06/2023	Arsenic, total	0.00069 U	mg/L
G301	Compliance	E001	06/06/2023	Barium, total	0.0180	mg/L
G301	Compliance	E001	06/06/2023	Beryllium, total	0.00059 U	mg/L
G301	Compliance	E001	06/06/2023	Boron, total	2.50	mg/L
G301	Compliance	E001	06/06/2023	Cadmium, total	0.00074 U	mg/L
G301	Compliance	E001	06/06/2023	Calcium, total	110	mg/L
G301	Compliance	E001	06/06/2023	Chloride, total	13.0	mg/L
G301	Compliance	E001	06/06/2023	Chromium, total	0.0028 U	mg/L
G301	Compliance	E001	06/06/2023	Cobalt, total	0.0018 J	mg/L
G301	Compliance	E001	06/06/2023	Dissolved Oxygen	0.100	mg/L
G301	Compliance	E001	06/06/2023	Fluoride, total	0.197 J	mg/L
G301	Compliance	E001	06/06/2023	Lead, total	0.00046 J	mg/L
G301	Compliance	E001	06/06/2023	Lithium, total	0.005 U	mg/L
G301	Compliance	E001	06/06/2023	Mercury, total	0.00014 U	mg/L
G301	Compliance	E001	06/06/2023	Molybdenum, total	0.00074 U	mg/L
G301	Compliance	E001	06/06/2023	Oxidation Reduction Potential	-259	mV
G301	Compliance	E001	06/06/2023	pH (field)	6.8	SU
G301	Compliance	E001	06/06/2023	Radium 226 + Radium 228, total	0.0829	pCi/L
G301	Compliance	E001	06/06/2023	Selenium, total	0.00074 U	mg/L
G301	Compliance	E001	06/06/2023	Specific Conductance @ 25C (field)	1,335	micromhos/cm
G301	Compliance	E001	06/06/2023	Sulfate, total	540	mg/L
G301	Compliance	E001	06/06/2023	Temperature	18.1	degrees C
G301	Compliance	E001	06/06/2023	Thallium, total	0.00038 U	mg/L
G301	Compliance	E001	06/06/2023	Total Dissolved Solids	900	mg/L
G301	Compliance	E001	06/06/2023	Turbidity, field	141	NTU
G302	Compliance	E001	05/31/2023	Antimony, total	0.00043 U	mg/L
G302	Compliance	E001	05/31/2023	Arsenic, total	0.00220	mg/L
G302	Compliance	E001	05/31/2023	Barium, total	0.0420	mg/L
G302	Compliance	E001	05/31/2023	Beryllium, total	0.00059 U	mg/L
G302	Compliance	E001	05/31/2023	Boron, total	2.10	mg/L
G302	Compliance	E001	05/31/2023	Cadmium, total	0.00074 U	mg/L
G302	Compliance	E001	05/31/2023	Calcium, total	160	mg/L
G302	Compliance	E001	05/31/2023	Chloride, total	18.0 J	mg/L
G302	Compliance	E001	05/31/2023	Chromium, total	0.00400	mg/L
G302	Compliance	E001	05/31/2023	Cobalt, total	0.0100	mg/L
G302	Compliance	E001	05/31/2023	Dissolved Oxygen	2.60	mg/L
G302	Compliance	E001	05/31/2023	Fluoride, total	0.122 J	mg/L
G302	Compliance	E001	05/31/2023	Lead, total	0.00150	mg/L
G302	Compliance	E001	05/31/2023	Lithium, total	0.013 J	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G302	Compliance	E001	05/31/2023	Mercury, total	0.00014 J	mg/L
G302	Compliance	E001	05/31/2023	Molybdenum, total	0.00110 J	mg/L
G302	Compliance	E001	05/31/2023	Oxidation Reduction Potential	-79.9	mV
G302	Compliance	E001	05/31/2023	pH (field)	7.0	SU
G302	Compliance	E001	05/31/2023	Radium 226 + Radium 228, total	1.50 J	pCi/L
G302	Compliance	E001	05/31/2023	Selenium, total	0.00074 U	mg/L
G302	Compliance	E001	05/31/2023	Specific Conductance @ 25C (field)	1,602	micromhos/cm
G302	Compliance	E001	05/31/2023	Sulfate, total	450	mg/L
G302	Compliance	E001	05/31/2023	Temperature	17.6	degrees C
G302	Compliance	E001	05/31/2023	Thallium, total	0.00038 U	mg/L
G302	Compliance	E001	05/31/2023	Total Dissolved Solids	1,200	mg/L
G302	Compliance	E001	05/31/2023	Turbidity, field	131	NTU
G303	Compliance	E001	05/31/2023	Antimony, total	0.00043 U	mg/L
G303	Compliance	E001	05/31/2023	Arsenic, total	0.00260	mg/L
G303	Compliance	E001	05/31/2023	Barium, total	0.0150	mg/L
G303	Compliance	E001	05/31/2023	Beryllium, total	0.00059 U	mg/L
G303	Compliance	E001	05/31/2023	Boron, total	1.80	mg/L
G303	Compliance	E001	05/31/2023	Cadmium, total	0.00074 U	mg/L
G303	Compliance	E001	05/31/2023	Calcium, total	180	mg/L
G303	Compliance	E001	05/31/2023	Chloride, total	25.0	mg/L
G303	Compliance	E001	05/31/2023	Chromium, total	0.0028 U	mg/L
G303	Compliance	E001	05/31/2023	Cobalt, total	0.0018 J	mg/L
G303	Compliance	E001	05/31/2023	Dissolved Oxygen	1.30	mg/L
G303	Compliance	E001	05/31/2023	Fluoride, total	0.0653 J	mg/L
G303	Compliance	E001	05/31/2023	Lead, total	0.00022 U	mg/L
G303	Compliance	E001	05/31/2023	Lithium, total	0.0320	mg/L
G303	Compliance	E001	05/31/2023	Mercury, total	0.00017 J	mg/L
G303	Compliance	E001	05/31/2023	Molybdenum, total	0.00160	mg/L
G303	Compliance	E001	05/31/2023	Oxidation Reduction Potential	-70.2	mV
G303	Compliance	E001	05/31/2023	pH (field)	7.1	SU
G303	Compliance	E001	05/31/2023	Radium 226 + Radium 228, total	1.22 J+	pCi/L
G303	Compliance	E001	05/31/2023	Selenium, total	0.00074 U	mg/L
G303	Compliance	E001	05/31/2023	Specific Conductance @ 25C (field)	2,302	micromhos/cm
G303	Compliance	E001	05/31/2023	Sulfate, total	740	mg/L
G303	Compliance	E001	05/31/2023	Temperature	17.8	degrees C
G303	Compliance	E001	05/31/2023	Thallium, total	0.00038 U	mg/L
G303	Compliance	E001	05/31/2023	Total Dissolved Solids	1,800 J	mg/L
G303	Compliance	E001	05/31/2023	Turbidity, field	40.6	NTU
G305	Compliance	E001	06/06/2023	Antimony, total	0.00043 U	mg/L
G305	Compliance	E001	06/06/2023	Arsenic, total	0.00170	mg/L
G305	Compliance	E001	06/06/2023	Barium, total	0.0380	mg/L
G305	Compliance	E001	06/06/2023	Beryllium, total	0.00059 U	mg/L
G305	Compliance	E001	06/06/2023	Boron, total	1.90	mg/L
G305	Compliance	E001	06/06/2023	Cadmium, total	0.00074 U	mg/L
G305	Compliance	E001	06/06/2023	Calcium, total	180	mg/L
G305	Compliance	E001	06/06/2023	Chloride, total	23.0	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G305	Compliance	E001	06/06/2023	Chromium, total	0.00770	mg/L
G305	Compliance	E001	06/06/2023	Cobalt, total	0.00230	mg/L
G305	Compliance	E001	06/06/2023	Dissolved Oxygen	1.50	mg/L
G305	Compliance	E001	06/06/2023	Fluoride, total	0.258	mg/L
G305	Compliance	E001	06/06/2023	Lead, total	0.00560	mg/L
G305	Compliance	E001	06/06/2023	Lithium, total	0.0092 J	mg/L
G305	Compliance	E001	06/06/2023	Mercury, total	0.00014 U	mg/L
G305	Compliance	E001	06/06/2023	Molybdenum, total	0.00093 J	mg/L
G305	Compliance	E001	06/06/2023	Oxidation Reduction Potential	-26.5	mV
G305	Compliance	E001	06/06/2023	pH (field)	7.3	SU
G305	Compliance	E001	06/06/2023	Radium 226 + Radium 228, total	1.63	pCi/L
G305	Compliance	E001	06/06/2023	Selenium, total	0.00097 J	mg/L
G305	Compliance	E001	06/06/2023	Specific Conductance @ 25C (field)	1,921	micromhos/cm
G305	Compliance	E001	06/06/2023	Sulfate, total	910	mg/L
G305	Compliance	E001	06/06/2023	Temperature	15.8	degrees C
G305	Compliance	E001	06/06/2023	Thallium, total	0.00038 U	mg/L
G305	Compliance	E001	06/06/2023	Total Dissolved Solids	1,500	mg/L
G305	Compliance	E001	06/06/2023	Turbidity, field	369	NTU
G307	Compliance	E001	06/05/2023	Antimony, total	0.00043 U	mg/L
G307	Compliance	E001	06/05/2023	Arsenic, total	0.00069 U	mg/L
G307	Compliance	E001	06/05/2023	Barium, total	0.0250	mg/L
G307	Compliance	E001	06/05/2023	Beryllium, total	0.00059 U	mg/L
G307	Compliance	E001	06/05/2023	Boron, total	2.00	mg/L
G307	Compliance	E001	06/05/2023	Cadmium, total	0.00074 U	mg/L
G307	Compliance	E001	06/05/2023	Calcium, total	150	mg/L
G307	Compliance	E001	06/05/2023	Chloride, total	9.20	mg/L
G307	Compliance	E001	06/05/2023	Chromium, total	0.0028 U	mg/L
G307	Compliance	E001	06/05/2023	Cobalt, total	0.00230	mg/L
G307	Compliance	E001	06/05/2023	Dissolved Oxygen	0.140	mg/L
G307	Compliance	E001	06/05/2023	Fluoride, total	0.325	mg/L
G307	Compliance	E001	06/05/2023	Lead, total	0.00022 U	mg/L
G307	Compliance	E001	06/05/2023	Lithium, total	0.005 U	mg/L
G307	Compliance	E001	06/05/2023	Mercury, total	0.00014 U	mg/L
G307	Compliance	E001	06/05/2023	Molybdenum, total	0.00092 J	mg/L
G307	Compliance	E001	06/05/2023	Oxidation Reduction Potential	40.1	mV
G307	Compliance	E001	06/05/2023	pH (field)	7.3	SU
G307	Compliance	E001	06/05/2023	Radium 226 + Radium 228, total	0.528	pCi/L
G307	Compliance	E001	06/05/2023	Selenium, total	0.00074 U	mg/L
G307	Compliance	E001	06/05/2023	Specific Conductance @ 25C (field)	1,337	micromhos/cm
G307	Compliance	E001	06/05/2023	Sulfate, total	530	mg/L
G307	Compliance	E001	06/05/2023	Temperature	17.0	degrees C
G307	Compliance	E001	06/05/2023	Thallium, total	0.00038 U	mg/L
G307	Compliance	E001	06/05/2023	Total Dissolved Solids	980	mg/L
G307	Compliance	E001	06/05/2023	Turbidity, field	75.9	NTU
G307D	Compliance	E001	06/05/2023	Antimony, total	0.00043 U	mg/L
G307D	Compliance	E001	06/05/2023	Arsenic, total	0.00140	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G307D	Compliance	E001	06/05/2023	Barium, total	0.0320	mg/L
G307D	Compliance	E001	06/05/2023	Beryllium, total	0.00059 U	mg/L
G307D	Compliance	E001	06/05/2023	Boron, total	1.50	mg/L
G307D	Compliance	E001	06/05/2023	Cadmium, total	0.00074 U	mg/L
G307D	Compliance	E001	06/05/2023	Calcium, total	150	mg/L
G307D	Compliance	E001	06/05/2023	Chloride, total	16.0	mg/L
G307D	Compliance	E001	06/05/2023	Chromium, total	0.0028 U	mg/L
G307D	Compliance	E001	06/05/2023	Cobalt, total	0.00072 J	mg/L
G307D	Compliance	E001	06/05/2023	Dissolved Oxygen	1.30	mg/L
G307D	Compliance	E001	06/05/2023	Fluoride, total	0.579	mg/L
G307D	Compliance	E001	06/05/2023	Lead, total	0.00022 U	mg/L
G307D	Compliance	E001	06/05/2023	Lithium, total	0.005 U	mg/L
G307D	Compliance	E001	06/05/2023	Mercury, total	0.00014 U	mg/L
G307D	Compliance	E001	06/05/2023	Molybdenum, total	0.00420	mg/L
G307D	Compliance	E001	06/05/2023	Oxidation Reduction Potential	-40.5	mV
G307D	Compliance	E001	06/05/2023	pH (field)	7.3	SU
G307D	Compliance	E001	06/05/2023	Radium 226 + Radium 228, total	1.02	pCi/L
G307D	Compliance	E001	06/05/2023	Selenium, total	0.00074 U	mg/L
G307D	Compliance	E001	06/05/2023	Specific Conductance @ 25C (field)	1,549	micromhos/cm
G307D	Compliance	E001	06/05/2023	Sulfate, total	610	mg/L
G307D	Compliance	E001	06/05/2023	Temperature	19.2	degrees C
G307D	Compliance	E001	06/05/2023	Thallium, total	0.00038 U	mg/L
G307D	Compliance	E001	06/05/2023	Total Dissolved Solids	1,100	mg/L
G307D	Compliance	E001	06/05/2023	Turbidity, field	268	NTU
G308	Compliance	E001	06/01/2023	Antimony, total	0.00043 U	mg/L
G308	Compliance	E001	06/01/2023	Arsenic, total	0.00086 J	mg/L
G308	Compliance	E001	06/01/2023	Barium, total	0.0210	mg/L
G308	Compliance	E001	06/01/2023	Beryllium, total	0.00059 U	mg/L
G308	Compliance	E001	06/01/2023	Boron, total	2.70	mg/L
G308	Compliance	E001	06/01/2023	Cadmium, total	0.00074 U	mg/L
G308	Compliance	E001	06/01/2023	Calcium, total	200	mg/L
G308	Compliance	E001	06/01/2023	Chloride, total	14.0	mg/L
G308	Compliance	E001	06/01/2023	Chromium, total	0.0028 U	mg/L
G308	Compliance	E001	06/01/2023	Cobalt, total	0.00048 U	mg/L
G308	Compliance	E001	06/01/2023	Dissolved Oxygen	0.900	mg/L
G308	Compliance	E001	06/01/2023	Fluoride, total	0.464	mg/L
G308	Compliance	E001	06/01/2023	Lead, total	0.00022 U	mg/L
G308	Compliance	E001	06/01/2023	Lithium, total	0.0062 J	mg/L
G308	Compliance	E001	06/01/2023	Mercury, total	0.00014 U	mg/L
G308	Compliance	E001	06/01/2023	Molybdenum, total	0.00140	mg/L
G308	Compliance	E001	06/01/2023	Oxidation Reduction Potential	98.2	mV
G308	Compliance	E001	06/01/2023	pH (field)	7.3	SU
G308	Compliance	E001	06/01/2023	Radium 226 + Radium 228, total	0.481	pCi/L
G308	Compliance	E001	06/01/2023	Selenium, total	0.00074 U	mg/L
G308	Compliance	E001	06/01/2023	Specific Conductance @ 25C (field)	2,114	micromhos/cm
G308	Compliance	E001	06/01/2023	Sulfate, total	1,000	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G308	Compliance	E001	06/01/2023	Temperature	16.8	degrees C
G308	Compliance	E001	06/01/2023	Thallium, total	0.00038 U	mg/L
G308	Compliance	E001	06/01/2023	Total Dissolved Solids	1,800	mg/L
G308	Compliance	E001	06/01/2023	Turbidity, field	56.5	NTU
G310	Compliance	E001	06/01/2023	Antimony, total	0.00043 U	mg/L
G310	Compliance	E001	06/01/2023	Arsenic, total	0.00071 J	mg/L
G310	Compliance	E001	06/01/2023	Barium, total	0.0140	mg/L
G310	Compliance	E001	06/01/2023	Beryllium, total	0.00059 U	mg/L
G310	Compliance	E001	06/01/2023	Boron, total	1.70	mg/L
G310	Compliance	E001	06/01/2023	Cadmium, total	0.00074 U	mg/L
G310	Compliance	E001	06/01/2023	Calcium, total	150	mg/L
G310	Compliance	E001	06/01/2023	Chloride, total	14.0	mg/L
G310	Compliance	E001	06/01/2023	Chromium, total	0.0028 U	mg/L
G310	Compliance	E001	06/01/2023	Cobalt, total	0.0013 J	mg/L
G310	Compliance	E001	06/01/2023	Dissolved Oxygen	1.60	mg/L
G310	Compliance	E001	06/01/2023	Fluoride, total	0.226 J	mg/L
G310	Compliance	E001	06/01/2023	Lead, total	0.00032 J	mg/L
G310	Compliance	E001	06/01/2023	Lithium, total	0.0055 J	mg/L
G310	Compliance	E001	06/01/2023	Mercury, total	0.00014 U	mg/L
G310	Compliance	E001	06/01/2023	Molybdenum, total	0.00074 U	mg/L
G310	Compliance	E001	06/01/2023	Oxidation Reduction Potential	114	mV
G310	Compliance	E001	06/01/2023	pH (field)	7.2	SU
G310	Compliance	E001	06/01/2023	Radium 226 + Radium 228, total	1.52 J+	pCi/L
G310	Compliance	E001	06/01/2023	Selenium, total	0.00074 U	mg/L
G310	Compliance	E001	06/01/2023	Specific Conductance @ 25C (field)	1,566	micromhos/cm
G310	Compliance	E001	06/01/2023	Sulfate, total	620	mg/L
G310	Compliance	E001	06/01/2023	Temperature	17.1	degrees C
G310	Compliance	E001	06/01/2023	Thallium, total	0.00038 U	mg/L
G310	Compliance	E001	06/01/2023	Total Dissolved Solids	1,100	mg/L
G310	Compliance	E001	06/01/2023	Turbidity, field	55.3	NTU
G312	Compliance	E001	06/01/2023	Antimony, total	0.00043 U	mg/L
G312	Compliance	E001	06/01/2023	Arsenic, total	0.00069 U	mg/L
G312	Compliance	E001	06/01/2023	Barium, total	0.0290	mg/L
G312	Compliance	E001	06/01/2023	Beryllium, total	0.00059 U	mg/L
G312	Compliance	E001	06/01/2023	Boron, total	1.30	mg/L
G312	Compliance	E001	06/01/2023	Cadmium, total	0.00074 U	mg/L
G312	Compliance	E001	06/01/2023	Calcium, total	160	mg/L
G312	Compliance	E001	06/01/2023	Chloride, total	23.0	mg/L
G312	Compliance	E001	06/01/2023	Chromium, total	0.0028 U	mg/L
G312	Compliance	E001	06/01/2023	Cobalt, total	0.0014 J	mg/L
G312	Compliance	E001	06/01/2023	Dissolved Oxygen	1.10	mg/L
G312	Compliance	E001	06/01/2023	Fluoride, total	0.102 J	mg/L
G312	Compliance	E001	06/01/2023	Lead, total	0.00022 U	mg/L
G312	Compliance	E001	06/01/2023	Lithium, total	0.0089 J	mg/L
G312	Compliance	E001	06/01/2023	Mercury, total	0.00014 U	mg/L
G312	Compliance	E001	06/01/2023	Molybdenum, total	0.00074 U	mg/L

TABLE 1.
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COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G312	Compliance	E001	06/01/2023	Oxidation Reduction Potential	150	mV
G312	Compliance	E001	06/01/2023	pH (field)	6.5	SU
G312	Compliance	E001	06/01/2023	Radium 226 + Radium 228, total	0.845 J+	pCi/L
G312	Compliance	E001	06/01/2023	Selenium, total	0.00074 U	mg/L
G312	Compliance	E001	06/01/2023	Specific Conductance @ 25C (field)	1,412	micromhos/cm
G312	Compliance	E001	06/01/2023	Sulfate, total	750	mg/L
G312	Compliance	E001	06/01/2023	Temperature	17.6	degrees C
G312	Compliance	E001	06/01/2023	Thallium, total	0.00038 U	mg/L
G312	Compliance	E001	06/01/2023	Total Dissolved Solids	1,700	mg/L
G312	Compliance	E001	06/01/2023	Turbidity, field	4.35	NTU
G313	Compliance	E001	06/06/2023	Antimony, total	0.00043 U	mg/L
G313	Compliance	E001	06/06/2023	Arsenic, total	0.00069 U	mg/L
G313	Compliance	E001	06/06/2023	Barium, total	0.0180	mg/L
G313	Compliance	E001	06/06/2023	Beryllium, total	0.00059 U	mg/L
G313	Compliance	E001	06/06/2023	Boron, total	3.30	mg/L
G313	Compliance	E001	06/06/2023	Cadmium, total	0.00074 U	mg/L
G313	Compliance	E001	06/06/2023	Calcium, total	200	mg/L
G313	Compliance	E001	06/06/2023	Chloride, total	23.0	mg/L
G313	Compliance	E001	06/06/2023	Chromium, total	0.0028 U	mg/L
G313	Compliance	E001	06/06/2023	Cobalt, total	0.00077 J	mg/L
G313	Compliance	E001	06/06/2023	Dissolved Oxygen	0.810	mg/L
G313	Compliance	E001	06/06/2023	Fluoride, total	0.166 J	mg/L
G313	Compliance	E001	06/06/2023	Lead, total	0.00022 U	mg/L
G313	Compliance	E001	06/06/2023	Lithium, total	0.016 J	mg/L
G313	Compliance	E001	06/06/2023	Mercury, total	0.00014 U	mg/L
G313	Compliance	E001	06/06/2023	Molybdenum, total	0.00120	mg/L
G313	Compliance	E001	06/06/2023	Oxidation Reduction Potential	38.2	mV
G313	Compliance	E001	06/06/2023	pH (field)	6.9	SU
G313	Compliance	E001	06/06/2023	Radium 226 + Radium 228, total	0.879	pCi/L
G313	Compliance	E001	06/06/2023	Selenium, total	0.00074 U	mg/L
G313	Compliance	E001	06/06/2023	Specific Conductance @ 25C (field)	1,971	micromhos/cm
G313	Compliance	E001	06/06/2023	Sulfate, total	720	mg/L
G313	Compliance	E001	06/06/2023	Temperature	18.3	degrees C
G313	Compliance	E001	06/06/2023	Thallium, total	0.00038 U	mg/L
G313	Compliance	E001	06/06/2023	Total Dissolved Solids	1,400	mg/L
G313	Compliance	E001	06/06/2023	Turbidity, field	236	NTU
G314	Compliance	E001	06/01/2023	Antimony, total	0.00043 U	mg/L
G314	Compliance	E001	06/01/2023	Arsenic, total	0.00170	mg/L
G314	Compliance	E001	06/01/2023	Barium, total	0.0370	mg/L
G314	Compliance	E001	06/01/2023	Beryllium, total	0.00059 U	mg/L
G314	Compliance	E001	06/01/2023	Boron, total	0.190	mg/L
G314	Compliance	E001	06/01/2023	Cadmium, total	0.00074 U	mg/L
G314	Compliance	E001	06/01/2023	Calcium, total	250	mg/L
G314	Compliance	E001	06/01/2023	Chloride, total	30.0	mg/L
G314	Compliance	E001	06/01/2023	Chromium, total	0.0028 U	mg/L
G314	Compliance	E001	06/01/2023	Cobalt, total	0.00350	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G314	Compliance	E001	06/01/2023	Dissolved Oxygen	0.680	mg/L
G314	Compliance	E001	06/01/2023	Fluoride, total	0.185 J	mg/L
G314	Compliance	E001	06/01/2023	Lead, total	0.00110	mg/L
G314	Compliance	E001	06/01/2023	Lithium, total	0.013 J	mg/L
G314	Compliance	E001	06/01/2023	Mercury, total	0.00014 U	mg/L
G314	Compliance	E001	06/01/2023	Molybdenum, total	0.00480	mg/L
G314	Compliance	E001	06/01/2023	Oxidation Reduction Potential	-4.40	mV
G314	Compliance	E001	06/01/2023	pH (field)	6.8	SU
G314	Compliance	E001	06/01/2023	Radium 226 + Radium 228, total	0.924 J+	pCi/L
G314	Compliance	E001	06/01/2023	Selenium, total	0.00074 U	mg/L
G314	Compliance	E001	06/01/2023	Specific Conductance @ 25C (field)	3,987	micromhos/cm
G314	Compliance	E001	06/01/2023	Sulfate, total	2,000	mg/L
G314	Compliance	E001	06/01/2023	Temperature	16.1	degrees C
G314	Compliance	E001	06/01/2023	Thallium, total	0.00038 U	mg/L
G314	Compliance	E001	06/01/2023	Total Dissolved Solids	3,700	mg/L
G314	Compliance	E001	06/01/2023	Turbidity, field	11.0	NTU
G314D	Compliance	E001	06/01/2023	Antimony, total	0.00043 U	mg/L
G314D	Compliance	E001	06/01/2023	Arsenic, total	0.00069 U	mg/L
G314D	Compliance	E001	06/01/2023	Barium, total	0.0160	mg/L
G314D	Compliance	E001	06/01/2023	Beryllium, total	0.00059 U	mg/L
G314D	Compliance	E001	06/01/2023	Boron, total	0.130	mg/L
G314D	Compliance	E001	06/01/2023	Cadmium, total	0.00074 U	mg/L
G314D	Compliance	E001	06/01/2023	Calcium, total	770	mg/L
G314D	Compliance	E001	06/01/2023	Chloride, total	59.0	mg/L
G314D	Compliance	E001	06/01/2023	Chromium, total	0.0028 U	mg/L
G314D	Compliance	E001	06/01/2023	Cobalt, total	0.0017 J	mg/L
G314D	Compliance	E001	06/01/2023	Dissolved Oxygen	0.450	mg/L
G314D	Compliance	E001	06/01/2023	Fluoride, total	0.607	mg/L
G314D	Compliance	E001	06/01/2023	Lead, total	0.00022 U	mg/L
G314D	Compliance	E001	06/01/2023	Lithium, total	0.005 U	mg/L
G314D	Compliance	E001	06/01/2023	Mercury, total	0.00014 U	mg/L
G314D	Compliance	E001	06/01/2023	Molybdenum, total	0.00260	mg/L
G314D	Compliance	E001	06/01/2023	Oxidation Reduction Potential	-8.30	mV
G314D	Compliance	E001	06/01/2023	pH (field)	7.1	SU
G314D	Compliance	E001	06/01/2023	Radium 226 + Radium 228, total	2.54	pCi/L
G314D	Compliance	E001	06/01/2023	Selenium, total	0.00074 U	mg/L
G314D	Compliance	E001	06/01/2023	Specific Conductance @ 25C (field)	3,071	micromhos/cm
G314D	Compliance	E001	06/01/2023	Sulfate, total	1,100	mg/L
G314D	Compliance	E001	06/01/2023	Temperature	15.0	degrees C
G314D	Compliance	E001	06/01/2023	Thallium, total	0.00038 U	mg/L
G314D	Compliance	E001	06/01/2023	Total Dissolved Solids	2,400 J	mg/L
G314D	Compliance	E001	06/01/2023	Turbidity, field	654	NTU
G315	Compliance	E001	06/07/2023	Antimony, total	0.00043 U	mg/L
G315	Compliance	E001	06/07/2023	Arsenic, total	0.00086 J	mg/L
G315	Compliance	E001	06/07/2023	Barium, total	0.0360	mg/L
G315	Compliance	E001	06/07/2023	Beryllium, total	0.00059 U	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2023
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G315	Compliance	E001	06/07/2023	Boron, total	1.20	mg/L
G315	Compliance	E001	06/07/2023	Cadmium, total	0.00074 U	mg/L
G315	Compliance	E001	06/07/2023	Calcium, total	140	mg/L
G315	Compliance	E001	06/07/2023	Chloride, total	15.0	mg/L
G315	Compliance	E001	06/07/2023	Chromium, total	0.0038 J	mg/L
G315	Compliance	E001	06/07/2023	Cobalt, total	0.0017 J	mg/L
G315	Compliance	E001	06/07/2023	Dissolved Oxygen	0.720	mg/L
G315	Compliance	E001	06/07/2023	Fluoride, total	0.286	mg/L
G315	Compliance	E001	06/07/2023	Lead, total	0.00180	mg/L
G315	Compliance	E001	06/07/2023	Lithium, total	0.0053 J	mg/L
G315	Compliance	E001	06/07/2023	Mercury, total	0.0002 U	mg/L
G315	Compliance	E001	06/07/2023	Molybdenum, total	0.00074 U	mg/L
G315	Compliance	E001	06/07/2023	Oxidation Reduction Potential	140	mV
G315	Compliance	E001	06/07/2023	pH (field)	6.9	SU
G315	Compliance	E001	06/07/2023	Radium 226 + Radium 228, total	0.344 <0	pCi/L
G315	Compliance	E001	06/07/2023	Selenium, total	0.00074 U	mg/L
G315	Compliance	E001	06/07/2023	Specific Conductance @ 25C (field)	1,491	micromhos/cm
G315	Compliance	E001	06/07/2023	Sulfate, total	600	mg/L
G315	Compliance	E001	06/07/2023	Temperature	14.4	degrees C
G315	Compliance	E001	06/07/2023	Thallium, total	0.00038 U	mg/L
G315	Compliance	E001	06/07/2023	Total Dissolved Solids	1,100	mg/L
G315	Compliance	E001	06/07/2023	Turbidity, field	115	NTU
G316	Compliance	E001	05/31/2023	Antimony, total	0.00043 U	mg/L
G316	Compliance	E001	05/31/2023	Arsenic, total	0.00670	mg/L
G316	Compliance	E001	05/31/2023	Barium, total	0.0660	mg/L
G316	Compliance	E001	05/31/2023	Beryllium, total	0.00059 U	mg/L
G316	Compliance	E001	05/31/2023	Boron, total	0.390	mg/L
G316	Compliance	E001	05/31/2023	Cadmium, total	0.00074 U	mg/L
G316	Compliance	E001	05/31/2023	Calcium, total	190	mg/L
G316	Compliance	E001	05/31/2023	Chloride, total	26.0	mg/L
G316	Compliance	E001	05/31/2023	Chromium, total	0.0028 U	mg/L
G316	Compliance	E001	05/31/2023	Cobalt, total	0.00250	mg/L
G316	Compliance	E001	05/31/2023	Dissolved Oxygen	0.950	mg/L
G316	Compliance	E001	05/31/2023	Fluoride, total	0.0809 J	mg/L
G316	Compliance	E001	05/31/2023	Lead, total	0.00022 U	mg/L
G316	Compliance	E001	05/31/2023	Lithium, total	0.005 U	mg/L
G316	Compliance	E001	05/31/2023	Mercury, total	0.00016 J	mg/L
G316	Compliance	E001	05/31/2023	Molybdenum, total	0.00400	mg/L
G316	Compliance	E001	05/31/2023	Oxidation Reduction Potential	-94.3	mV
G316	Compliance	E001	05/31/2023	pH (field)	7.2	SU
G316	Compliance	E001	05/31/2023	Radium 226 + Radium 228, total	1.81 J+	pCi/L
G316	Compliance	E001	05/31/2023	Selenium, total	0.00074 U	mg/L
G316	Compliance	E001	05/31/2023	Specific Conductance @ 25C (field)	2,221	micromhos/cm
G316	Compliance	E001	05/31/2023	Sulfate, total	760	mg/L
G316	Compliance	E001	05/31/2023	Temperature	14.5	degrees C
G316	Compliance	E001	05/31/2023	Thallium, total	0.00038 U	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2023
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G316	Compliance	E001	05/31/2023	Total Dissolved Solids	1,700	mg/L
G316	Compliance	E001	05/31/2023	Turbidity, field	65.4	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.

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2023
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COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G281	Background	E002	08/14/2023	Antimony, total	0.0008 U	mg/L
G281	Background	E002	08/14/2023	Arsenic, total	0.0004 U	mg/L
G281	Background	E002	08/14/2023	Barium, total	0.0707	mg/L
G281	Background	E002	08/14/2023	Beryllium, total	0.0002 U	mg/L
G281	Background	E002	08/14/2023	Boron, total	0.0092 U	mg/L
G281	Background	E002	08/14/2023	Cadmium, total	0.0002 U	mg/L
G281	Background	E002	08/14/2023	Calcium, total	137	mg/L
G281	Background	E002	08/14/2023	Chloride, total	88.0	mg/L
G281	Background	E002	08/14/2023	Chromium, total	0.0007 U	mg/L
G281	Background	E002	08/14/2023	Cobalt, total	0.0004 J	mg/L
G281	Background	E002	08/14/2023	Dissolved Oxygen	1.74	mg/L
G281	Background	E002	08/14/2023	Fluoride, total	0.300 J+	mg/L
G281	Background	E002	08/14/2023	Lead, total	0.0006 U	mg/L
G281	Background	E002	08/14/2023	Lithium, total	0.00420	mg/L
G281	Background	E002	08/14/2023	Mercury, total	0.00006 U	mg/L
G281	Background	E002	08/14/2023	Molybdenum, total	0.0006 U	mg/L
G281	Background	E002	08/14/2023	Oxidation Reduction Potential	102	mV
G281	Background	E002	08/14/2023	pH (field)	6.8	SU
G281	Background	E002	08/14/2023	Radium 226 + Radium 228, total	0.667	pCi/L
G281	Background	E002	08/14/2023	Selenium, total	0.0006 U	mg/L
G281	Background	E002	08/14/2023	Specific Conductance @ 25C (field)	1,740	micromhos/cm
G281	Background	E002	08/14/2023	Sulfate, total	268	mg/L
G281	Background	E002	08/14/2023	Temperature	18.6	degrees C
G281	Background	E002	08/14/2023	Thallium, total	0.001 U	mg/L
G281	Background	E002	08/14/2023	Total Dissolved Solids	930	mg/L
G281	Background	E002	08/14/2023	Turbidity, field	6.40	NTU
G306	Background	E002	08/10/2023	Antimony, total	0.0007 J	mg/L
G306	Background	E002	08/10/2023	Arsenic, total	0.00720	mg/L
G306	Background	E002	08/10/2023	Barium, total	0.0700	mg/L
G306	Background	E002	08/10/2023	Beryllium, total	0.0007 J	mg/L
G306	Background	E002	08/10/2023	Boron, total	2.74	mg/L
G306	Background	E002	08/10/2023	Cadmium, total	0.0002 U	mg/L
G306	Background	E002	08/10/2023	Calcium, total	81.3	mg/L
G306	Background	E002	08/10/2023	Chloride, total	1 J	mg/L
G306	Background	E002	08/10/2023	Chromium, total	0.0211	mg/L
G306	Background	E002	08/10/2023	Cobalt, total	0.00670	mg/L
G306	Background	E002	08/10/2023	Dissolved Oxygen	2.76	mg/L
G306	Background	E002	08/10/2023	Fluoride, total	0.180 J+	mg/L
G306	Background	E002	08/10/2023	Lead, total	0.00590	mg/L
G306	Background	E002	08/10/2023	Lithium, total	0.0149	mg/L
G306	Background	E002	08/10/2023	Mercury, total	0.00006 U	mg/L
G306	Background	E002	08/10/2023	Molybdenum, total	0.0014 J	mg/L
G306	Background	E002	08/10/2023	Oxidation Reduction Potential	143	mV
G306	Background	E002	08/10/2023	pH (field)	6.2	SU
G306	Background	E002	08/10/2023	Radium 226 + Radium 228, total	4.93	pCi/L
G306	Background	E002	08/10/2023	Selenium, total	0.0006 U	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G306	Background	E002	08/10/2023	Specific Conductance @ 25C (field)	1,220	micromhos/cm
G306	Background	E002	08/10/2023	Sulfate, total	141	mg/L
G306	Background	E002	08/10/2023	Temperature	14.5	degrees C
G306	Background	E002	08/10/2023	Thallium, total	0.001 U	mg/L
G306	Background	E002	08/10/2023	Total Dissolved Solids	455	mg/L
G306	Background	E002	08/10/2023	Turbidity, field	320	NTU
G301	Compliance	E002	08/09/2023	Antimony, total	0.0005 J	mg/L
G301	Compliance	E002	08/09/2023	Arsenic, total	0.0004 U	mg/L
G301	Compliance	E002	08/09/2023	Barium, total	0.0152	mg/L
G301	Compliance	E002	08/09/2023	Beryllium, total	0.0003 U	mg/L
G301	Compliance	E002	08/09/2023	Boron, total	2.08	mg/L
G301	Compliance	E002	08/09/2023	Cadmium, total	0.0002 U	mg/L
G301	Compliance	E002	08/09/2023	Calcium, total	113	mg/L
G301	Compliance	E002	08/09/2023	Chloride, total	12.0	mg/L
G301	Compliance	E002	08/09/2023	Chromium, total	0.001 J	mg/L
G301	Compliance	E002	08/09/2023	Cobalt, total	0.00150	mg/L
G301	Compliance	E002	08/09/2023	Dissolved Oxygen	0.440	mg/L
G301	Compliance	E002	08/09/2023	Fluoride, total	0.310 J+	mg/L
G301	Compliance	E002	08/09/2023	Lead, total	0.0006 U	mg/L
G301	Compliance	E002	08/09/2023	Lithium, total	0.00470	mg/L
G301	Compliance	E002	08/09/2023	Mercury, total	0.00006 U	mg/L
G301	Compliance	E002	08/09/2023	Molybdenum, total	0.0006 U	mg/L
G301	Compliance	E002	08/09/2023	Oxidation Reduction Potential	-96.0	mV
G301	Compliance	E002	08/09/2023	pH (field)	6.4	SU
G301	Compliance	E002	08/09/2023	Radium 226 + Radium 228, total	1.03	pCi/L
G301	Compliance	E002	08/09/2023	Selenium, total	0.0006 U	mg/L
G301	Compliance	E002	08/09/2023	Specific Conductance @ 25C (field)	2,190	micromhos/cm
G301	Compliance	E002	08/09/2023	Sulfate, total	513	mg/L
G301	Compliance	E002	08/09/2023	Temperature	16.5	degrees C
G301	Compliance	E002	08/09/2023	Thallium, total	0.001 U	mg/L
G301	Compliance	E002	08/09/2023	Total Dissolved Solids	1,000	mg/L
G301	Compliance	E002	08/09/2023	Turbidity, field	8.40	NTU
G302	Compliance	E002	08/09/2023	Antimony, total	0.0004 U	mg/L
G302	Compliance	E002	08/09/2023	Arsenic, total	0.00100 J	mg/L
G302	Compliance	E002	08/09/2023	Barium, total	0.0259	mg/L
G302	Compliance	E002	08/09/2023	Beryllium, total	0.0003 U	mg/L
G302	Compliance	E002	08/09/2023	Boron, total	1.93	mg/L
G302	Compliance	E002	08/09/2023	Cadmium, total	0.0002 U	mg/L
G302	Compliance	E002	08/09/2023	Calcium, total	157	mg/L
G302	Compliance	E002	08/09/2023	Chloride, total	9.00	mg/L
G302	Compliance	E002	08/09/2023	Chromium, total	0.0007 U	mg/L
G302	Compliance	E002	08/09/2023	Cobalt, total	0.00180	mg/L
G302	Compliance	E002	08/09/2023	Dissolved Oxygen	2.22	mg/L
G302	Compliance	E002	08/09/2023	Fluoride, total	0.280 J+	mg/L
G302	Compliance	E002	08/09/2023	Lead, total	0.0006 J	mg/L
G302	Compliance	E002	08/09/2023	Lithium, total	0.0111	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G302	Compliance	E002	08/09/2023	Mercury, total	0.00006 U	mg/L
G302	Compliance	E002	08/09/2023	Molybdenum, total	0.0006 J	mg/L
G302	Compliance	E002	08/09/2023	Oxidation Reduction Potential	-80.0	mV
G302	Compliance	E002	08/09/2023	pH (field)	6.5	SU
G302	Compliance	E002	08/09/2023	Radium 226 + Radium 228, total	0.923	pCi/L
G302	Compliance	E002	08/09/2023	Selenium, total	0.0006 U	mg/L
G302	Compliance	E002	08/09/2023	Specific Conductance @ 25C (field)	2,460	micromhos/cm
G302	Compliance	E002	08/09/2023	Sulfate, total	356	mg/L
G302	Compliance	E002	08/09/2023	Temperature	16.0	degrees C
G302	Compliance	E002	08/09/2023	Thallium, total	0.001 U	mg/L
G302	Compliance	E002	08/09/2023	Total Dissolved Solids	998	mg/L
G302	Compliance	E002	08/09/2023	Turbidity, field	8.10	NTU
G303	Compliance	E002	08/09/2023	Antimony, total	0.0004 U	mg/L
G303	Compliance	E002	08/09/2023	Arsenic, total	0.00260	mg/L
G303	Compliance	E002	08/09/2023	Barium, total	0.0183	mg/L
G303	Compliance	E002	08/09/2023	Beryllium, total	0.0003 U	mg/L
G303	Compliance	E002	08/09/2023	Boron, total	1.95	mg/L
G303	Compliance	E002	08/09/2023	Cadmium, total	0.0002 U	mg/L
G303	Compliance	E002	08/09/2023	Calcium, total	190	mg/L
G303	Compliance	E002	08/09/2023	Chloride, total	27.0	mg/L
G303	Compliance	E002	08/09/2023	Chromium, total	0.0014 J	mg/L
G303	Compliance	E002	08/09/2023	Cobalt, total	0.00240	mg/L
G303	Compliance	E002	08/09/2023	Dissolved Oxygen	2.18	mg/L
G303	Compliance	E002	08/09/2023	Fluoride, total	0.270 J+	mg/L
G303	Compliance	E002	08/09/2023	Lead, total	0.00110	mg/L
G303	Compliance	E002	08/09/2023	Lithium, total	0.0398	mg/L
G303	Compliance	E002	08/09/2023	Mercury, total	0.00006 U	mg/L
G303	Compliance	E002	08/09/2023	Molybdenum, total	0.00200	mg/L
G303	Compliance	E002	08/09/2023	Oxidation Reduction Potential	-91.0	mV
G303	Compliance	E002	08/09/2023	pH (field)	6.8	SU
G303	Compliance	E002	08/09/2023	Radium 226 + Radium 228, total	1.36	pCi/L
G303	Compliance	E002	08/09/2023	Selenium, total	0.0006 U	mg/L
G303	Compliance	E002	08/09/2023	Specific Conductance @ 25C (field)	3,750	micromhos/cm
G303	Compliance	E002	08/09/2023	Sulfate, total	723	mg/L
G303	Compliance	E002	08/09/2023	Temperature	15.4	degrees C
G303	Compliance	E002	08/09/2023	Thallium, total	0.001 U	mg/L
G303	Compliance	E002	08/09/2023	Total Dissolved Solids	1,620	mg/L
G303	Compliance	E002	08/09/2023	Turbidity, field	43.0	NTU
G305	Compliance	E002	08/10/2023	Antimony, total	0.0009 J	mg/L
G305	Compliance	E002	08/10/2023	Arsenic, total	0.0007 J	mg/L
G305	Compliance	E002	08/10/2023	Barium, total	0.0254	mg/L
G305	Compliance	E002	08/10/2023	Beryllium, total	0.0002 U	mg/L
G305	Compliance	E002	08/10/2023	Boron, total	2.66	mg/L
G305	Compliance	E002	08/10/2023	Cadmium, total	0.0002 U	mg/L
G305	Compliance	E002	08/10/2023	Calcium, total	188	mg/L
G305	Compliance	E002	08/10/2023	Chloride, total	21.0	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G305	Compliance	E002	08/10/2023	Chromium, total	0.0012 J	mg/L
G305	Compliance	E002	08/10/2023	Cobalt, total	0.0006 J	mg/L
G305	Compliance	E002	08/10/2023	Dissolved Oxygen	1.76	mg/L
G305	Compliance	E002	08/10/2023	Fluoride, total	0.490 J+	mg/L
G305	Compliance	E002	08/10/2023	Lead, total	0.0007 J	mg/L
G305	Compliance	E002	08/10/2023	Lithium, total	0.00850	mg/L
G305	Compliance	E002	08/10/2023	Mercury, total	0.00006 U	mg/L
G305	Compliance	E002	08/10/2023	Molybdenum, total	0.00160	mg/L
G305	Compliance	E002	08/10/2023	Oxidation Reduction Potential	-41.0	mV
G305	Compliance	E002	08/10/2023	pH (field)	7.3	SU
G305	Compliance	E002	08/10/2023	Radium 226 + Radium 228, total	0.549	pCi/L
G305	Compliance	E002	08/10/2023	Selenium, total	0.0006 U	mg/L
G305	Compliance	E002	08/10/2023	Specific Conductance @ 25C (field)	3,230	micromhos/cm
G305	Compliance	E002	08/10/2023	Sulfate, total	863	mg/L
G305	Compliance	E002	08/10/2023	Temperature	15.4	degrees C
G305	Compliance	E002	08/10/2023	Thallium, total	0.001 U	mg/L
G305	Compliance	E002	08/10/2023	Total Dissolved Solids	1,580	mg/L
G305	Compliance	E002	08/10/2023	Turbidity, field	13.0	NTU
G307D	Compliance	E002	08/10/2023	Antimony, total	0.0008 J	mg/L
G307D	Compliance	E002	08/10/2023	Arsenic, total	0.00190	mg/L
G307D	Compliance	E002	08/10/2023	Barium, total	0.0217	mg/L
G307D	Compliance	E002	08/10/2023	Beryllium, total	0.0002 U	mg/L
G307D	Compliance	E002	08/10/2023	Boron, total	2.54	mg/L
G307D	Compliance	E002	08/10/2023	Cadmium, total	0.0002 U	mg/L
G307D	Compliance	E002	08/10/2023	Calcium, total	136	mg/L
G307D	Compliance	E002	08/10/2023	Chloride, total	14.0	mg/L
G307D	Compliance	E002	08/10/2023	Chromium, total	0.001 J	mg/L
G307D	Compliance	E002	08/10/2023	Cobalt, total	0.0009 J	mg/L
G307D	Compliance	E002	08/10/2023	Dissolved Oxygen	0.790	mg/L
G307D	Compliance	E002	08/10/2023	Fluoride, total	0.600 J+	mg/L
G307D	Compliance	E002	08/10/2023	Lead, total	0.0006 U	mg/L
G307D	Compliance	E002	08/10/2023	Lithium, total	0.00320	mg/L
G307D	Compliance	E002	08/10/2023	Mercury, total	0.00006 U	mg/L
G307D	Compliance	E002	08/10/2023	Molybdenum, total	0.00540	mg/L
G307D	Compliance	E002	08/10/2023	Oxidation Reduction Potential	-70.0	mV
G307D	Compliance	E002	08/10/2023	pH (field)	7.2	SU
G307D	Compliance	E002	08/10/2023	Radium 226 + Radium 228, total	0.535	pCi/L
G307D	Compliance	E002	08/10/2023	Selenium, total	0.0006 U	mg/L
G307D	Compliance	E002	08/10/2023	Specific Conductance @ 25C (field)	2,580	micromhos/cm
G307D	Compliance	E002	08/10/2023	Sulfate, total	589	mg/L
G307D	Compliance	E002	08/10/2023	Temperature	19.8	degrees C
G307D	Compliance	E002	08/10/2023	Thallium, total	0.001 U	mg/L
G307D	Compliance	E002	08/10/2023	Total Dissolved Solids	1,080	mg/L
G307D	Compliance	E002	08/10/2023	Turbidity, field	20.0	NTU
G308	Compliance	E002	08/10/2023	Antimony, total	0.0006 U	mg/L
G308	Compliance	E002	08/10/2023	Arsenic, total	0.0005 J	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G308	Compliance	E002	08/10/2023	Barium, total	0.0222	mg/L
G308	Compliance	E002	08/10/2023	Beryllium, total	0.0002 U	mg/L
G308	Compliance	E002	08/10/2023	Boron, total	2.64	mg/L
G308	Compliance	E002	08/10/2023	Cadmium, total	0.0002 U	mg/L
G308	Compliance	E002	08/10/2023	Calcium, total	196	mg/L
G308	Compliance	E002	08/10/2023	Chloride, total	10.0	mg/L
G308	Compliance	E002	08/10/2023	Chromium, total	0.0009 J	mg/L
G308	Compliance	E002	08/10/2023	Cobalt, total	0.0004 J	mg/L
G308	Compliance	E002	08/10/2023	Dissolved Oxygen	0.490	mg/L
G308	Compliance	E002	08/10/2023	Fluoride, total	0.640	mg/L
G308	Compliance	E002	08/10/2023	Lead, total	0.0006 U	mg/L
G308	Compliance	E002	08/10/2023	Lithium, total	0.00770	mg/L
G308	Compliance	E002	08/10/2023	Mercury, total	0.00006 U	mg/L
G308	Compliance	E002	08/10/2023	Molybdenum, total	0.00160	mg/L
G308	Compliance	E002	08/10/2023	Oxidation Reduction Potential	-3.00	mV
G308	Compliance	E002	08/10/2023	pH (field)	7.3	SU
G308	Compliance	E002	08/10/2023	Radium 226 + Radium 228, total	0.572	pCi/L
G308	Compliance	E002	08/10/2023	Selenium, total	0.0006 U	mg/L
G308	Compliance	E002	08/10/2023	Specific Conductance @ 25C (field)	3,500	micromhos/cm
G308	Compliance	E002	08/10/2023	Sulfate, total	996	mg/L
G308	Compliance	E002	08/10/2023	Temperature	16.2	degrees C
G308	Compliance	E002	08/10/2023	Thallium, total	0.001 U	mg/L
G308	Compliance	E002	08/10/2023	Total Dissolved Solids	1,760	mg/L
G308	Compliance	E002	08/10/2023	Turbidity, field	9.00	NTU
G310	Compliance	E002	08/09/2023	Antimony, total	0.0004 U	mg/L
G310	Compliance	E002	08/09/2023	Arsenic, total	0.0004 U	mg/L
G310	Compliance	E002	08/09/2023	Barium, total	0.0147	mg/L
G310	Compliance	E002	08/09/2023	Beryllium, total	0.0003 U	mg/L
G310	Compliance	E002	08/09/2023	Boron, total	1.95	mg/L
G310	Compliance	E002	08/09/2023	Cadmium, total	0.0002 J	mg/L
G310	Compliance	E002	08/09/2023	Calcium, total	158	mg/L
G310	Compliance	E002	08/09/2023	Chloride, total	14.0	mg/L
G310	Compliance	E002	08/09/2023	Chromium, total	0.0007 U	mg/L
G310	Compliance	E002	08/09/2023	Cobalt, total	0.00130	mg/L
G310	Compliance	E002	08/09/2023	Dissolved Oxygen	0.480	mg/L
G310	Compliance	E002	08/09/2023	Fluoride, total	0.320 J+	mg/L
G310	Compliance	E002	08/09/2023	Lead, total	0.0006 J	mg/L
G310	Compliance	E002	08/09/2023	Lithium, total	0.00600	mg/L
G310	Compliance	E002	08/09/2023	Mercury, total	0.00006 U	mg/L
G310	Compliance	E002	08/09/2023	Molybdenum, total	0.0006 U	mg/L
G310	Compliance	E002	08/09/2023	Oxidation Reduction Potential	99.0	mV
G310	Compliance	E002	08/09/2023	pH (field)	6.8	SU
G310	Compliance	E002	08/09/2023	Radium 226 + Radium 228, total	0.557	pCi/L
G310	Compliance	E002	08/09/2023	Selenium, total	0.0006 U	mg/L
G310	Compliance	E002	08/09/2023	Specific Conductance @ 25C (field)	2,640	micromhos/cm
G310	Compliance	E002	08/09/2023	Sulfate, total	611	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G310	Compliance	E002	08/09/2023	Temperature	15.5	degrees C
G310	Compliance	E002	08/09/2023	Thallium, total	0.001 U	mg/L
G310	Compliance	E002	08/09/2023	Total Dissolved Solids	1,160	mg/L
G310	Compliance	E002	08/09/2023	Turbidity, field	1.10	NTU
G312	Compliance	E002	08/09/2023	Antimony, total	0.0004 U	mg/L
G312	Compliance	E002	08/09/2023	Arsenic, total	0.0005 J	mg/L
G312	Compliance	E002	08/09/2023	Barium, total	0.0306	mg/L
G312	Compliance	E002	08/09/2023	Beryllium, total	0.0003 J	mg/L
G312	Compliance	E002	08/09/2023	Boron, total	3.51	mg/L
G312	Compliance	E002	08/09/2023	Cadmium, total	0.0002 U	mg/L
G312	Compliance	E002	08/09/2023	Calcium, total	242	mg/L
G312	Compliance	E002	08/09/2023	Chloride, total	31.0	mg/L
G312	Compliance	E002	08/09/2023	Chromium, total	0.0007 U	mg/L
G312	Compliance	E002	08/09/2023	Cobalt, total	0.00460	mg/L
G312	Compliance	E002	08/09/2023	Dissolved Oxygen	0.530	mg/L
G312	Compliance	E002	08/09/2023	Fluoride, total	0.220 J+	mg/L
G312	Compliance	E002	08/09/2023	Lead, total	0.0006 U	mg/L
G312	Compliance	E002	08/09/2023	Lithium, total	0.0180	mg/L
G312	Compliance	E002	08/09/2023	Mercury, total	0.00006 U	mg/L
G312	Compliance	E002	08/09/2023	Molybdenum, total	0.006 U	mg/L
G312	Compliance	E002	08/09/2023	Oxidation Reduction Potential	3.00	mV
G312	Compliance	E002	08/09/2023	pH (field)	6.1	SU
G312	Compliance	E002	08/09/2023	Radium 226 + Radium 228, total	0.816	pCi/L
G312	Compliance	E002	08/09/2023	Selenium, total	0.0006 U	mg/L
G312	Compliance	E002	08/09/2023	Specific Conductance @ 25C (field)	3,870	micromhos/cm
G312	Compliance	E002	08/09/2023	Sulfate, total	965	mg/L
G312	Compliance	E002	08/09/2023	Temperature	16.6	degrees C
G312	Compliance	E002	08/09/2023	Thallium, total	0.001 U	mg/L
G312	Compliance	E002	08/09/2023	Total Dissolved Solids	2,010	mg/L
G312	Compliance	E002	08/09/2023	Turbidity, field	8.20	NTU
G313	Compliance	E002	08/09/2023	Antimony, total	0.0004 U	mg/L
G313	Compliance	E002	08/09/2023	Arsenic, total	0.0005 J	mg/L
G313	Compliance	E002	08/09/2023	Barium, total	0.0193	mg/L
G313	Compliance	E002	08/09/2023	Beryllium, total	0.0003 U	mg/L
G313	Compliance	E002	08/09/2023	Boron, total	3.63	mg/L
G313	Compliance	E002	08/09/2023	Cadmium, total	0.0002 U	mg/L
G313	Compliance	E002	08/09/2023	Calcium, total	200	mg/L
G313	Compliance	E002	08/09/2023	Chloride, total	22.0	mg/L
G313	Compliance	E002	08/09/2023	Chromium, total	0.0008 J	mg/L
G313	Compliance	E002	08/09/2023	Cobalt, total	0.0008 J	mg/L
G313	Compliance	E002	08/09/2023	Dissolved Oxygen	0.440	mg/L
G313	Compliance	E002	08/09/2023	Fluoride, total	0.320 J+	mg/L
G313	Compliance	E002	08/09/2023	Lead, total	0.0006 U	mg/L
G313	Compliance	E002	08/09/2023	Lithium, total	0.0181	mg/L
G313	Compliance	E002	08/09/2023	Mercury, total	0.00006 U	mg/L
G313	Compliance	E002	08/09/2023	Molybdenum, total	0.0012 J	mg/L

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Well ID	Well Type	Event	Date	Parameter	Result	Unit
G313	Compliance	E002	08/09/2023	Oxidation Reduction Potential	-36.0	mV
G313	Compliance	E002	08/09/2023	pH (field)	6.7	SU
G313	Compliance	E002	08/09/2023	Radium 226 + Radium 228, total	0.627	pCi/L
G313	Compliance	E002	08/09/2023	Selenium, total	0.0006 U	mg/L
G313	Compliance	E002	08/09/2023	Specific Conductance @ 25C (field)	3,380	micromhos/cm
G313	Compliance	E002	08/09/2023	Sulfate, total	667	mg/L
G313	Compliance	E002	08/09/2023	Temperature	18.1	degrees C
G313	Compliance	E002	08/09/2023	Thallium, total	0.001 U	mg/L
G313	Compliance	E002	08/09/2023	Total Dissolved Solids	1,500	mg/L
G313	Compliance	E002	08/09/2023	Turbidity, field	9.30	NTU
G314	Compliance	E002	08/09/2023	Antimony, total	0.00110	mg/L
G314	Compliance	E002	08/09/2023	Arsenic, total	0.0007 J	mg/L
G314	Compliance	E002	08/09/2023	Barium, total	0.0183	mg/L
G314	Compliance	E002	08/09/2023	Beryllium, total	0.0003 U	mg/L
G314	Compliance	E002	08/09/2023	Boron, total	0.130 J+	mg/L
G314	Compliance	E002	08/09/2023	Cadmium, total	0.0002 U	mg/L
G314	Compliance	E002	08/09/2023	Calcium, total	631	mg/L
G314	Compliance	E002	08/09/2023	Chloride, total	31.0	mg/L
G314	Compliance	E002	08/09/2023	Chromium, total	0.0007 U	mg/L
G314	Compliance	E002	08/09/2023	Cobalt, total	0.00780	mg/L
G314	Compliance	E002	08/09/2023	Dissolved Oxygen	0.450	mg/L
G314	Compliance	E002	08/09/2023	Fluoride, total	0.210 J+	mg/L
G314	Compliance	E002	08/09/2023	Lead, total	0.0006 U	mg/L
G314	Compliance	E002	08/09/2023	Lithium, total	0.00560	mg/L
G314	Compliance	E002	08/09/2023	Mercury, total	0.00006 U	mg/L
G314	Compliance	E002	08/09/2023	Molybdenum, total	0.00210	mg/L
G314	Compliance	E002	08/09/2023	Oxidation Reduction Potential	-41.0	mV
G314	Compliance	E002	08/09/2023	pH (field)	6.4	SU
G314	Compliance	E002	08/09/2023	Radium 226 + Radium 228, total	1.2	pCi/L
G314	Compliance	E002	08/09/2023	Selenium, total	0.0006 U	mg/L
G314	Compliance	E002	08/09/2023	Specific Conductance @ 25C (field)	6,680	micromhos/cm
G314	Compliance	E002	08/09/2023	Sulfate, total	2,070	mg/L
G314	Compliance	E002	08/09/2023	Temperature	16.7	degrees C
G314	Compliance	E002	08/09/2023	Thallium, total	0.001 U	mg/L
G314	Compliance	E002	08/09/2023	Total Dissolved Solids	3,780	mg/L
G314	Compliance	E002	08/09/2023	Turbidity, field	2.20	NTU
G314D	Compliance	E002	08/09/2023	Antimony, total	0.0007 J	mg/L
G314D	Compliance	E002	08/09/2023	Arsenic, total	0.00130	mg/L
G314D	Compliance	E002	08/09/2023	Barium, total	0.0351	mg/L
G314D	Compliance	E002	08/09/2023	Beryllium, total	0.0003 U	mg/L
G314D	Compliance	E002	08/09/2023	Boron, total	0.190 J+	mg/L
G314D	Compliance	E002	08/09/2023	Cadmium, total	0.0002 U	mg/L
G314D	Compliance	E002	08/09/2023	Calcium, total	274	mg/L
G314D	Compliance	E002	08/09/2023	Chloride, total	63.0	mg/L
G314D	Compliance	E002	08/09/2023	Chromium, total	0.0007 U	mg/L
G314D	Compliance	E002	08/09/2023	Cobalt, total	0.00360	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G314D	Compliance	E002	08/09/2023	Dissolved Oxygen	0.640	mg/L
G314D	Compliance	E002	08/09/2023	Fluoride, total	0.650	mg/L
G314D	Compliance	E002	08/09/2023	Lead, total	0.0006 U	mg/L
G314D	Compliance	E002	08/09/2023	Lithium, total	0.0122	mg/L
G314D	Compliance	E002	08/09/2023	Mercury, total	0.00006 U	mg/L
G314D	Compliance	E002	08/09/2023	Molybdenum, total	0.00450	mg/L
G314D	Compliance	E002	08/09/2023	Oxidation Reduction Potential	-45.0	mV
G314D	Compliance	E002	08/09/2023	pH (field)	6.8	SU
G314D	Compliance	E002	08/09/2023	Radium 226 + Radium 228, total	1.6	pCi/L
G314D	Compliance	E002	08/09/2023	Selenium, total	0.0006 U	mg/L
G314D	Compliance	E002	08/09/2023	Specific Conductance @ 25C (field)	5,230	micromhos/cm
G314D	Compliance	E002	08/09/2023	Sulfate, total	1,090	mg/L
G314D	Compliance	E002	08/09/2023	Temperature	15.1	degrees C
G314D	Compliance	E002	08/09/2023	Thallium, total	0.001 U	mg/L
G314D	Compliance	E002	08/09/2023	Total Dissolved Solids	2,380	mg/L
G314D	Compliance	E002	08/09/2023	Turbidity, field	9.60	NTU
G315	Compliance	E002	08/10/2023	Antimony, total	0.0006 U	mg/L
G315	Compliance	E002	08/10/2023	Arsenic, total	0.0005 J	mg/L
G315	Compliance	E002	08/10/2023	Barium, total	0.0175	mg/L
G315	Compliance	E002	08/10/2023	Beryllium, total	0.0006 J	mg/L
G315	Compliance	E002	08/10/2023	Boron, total	1.68	mg/L
G315	Compliance	E002	08/10/2023	Cadmium, total	0.0002 U	mg/L
G315	Compliance	E002	08/10/2023	Calcium, total	147	mg/L
G315	Compliance	E002	08/10/2023	Chloride, total	14.0	mg/L
G315	Compliance	E002	08/10/2023	Chromium, total	0.0007 J	mg/L
G315	Compliance	E002	08/10/2023	Cobalt, total	0.00140	mg/L
G315	Compliance	E002	08/10/2023	Dissolved Oxygen	0.810	mg/L
G315	Compliance	E002	08/10/2023	Fluoride, total	0.300 J+	mg/L
G315	Compliance	E002	08/10/2023	Lead, total	0.0006 U	mg/L
G315	Compliance	E002	08/10/2023	Lithium, total	0.00660	mg/L
G315	Compliance	E002	08/10/2023	Mercury, total	0.00006 U	mg/L
G315	Compliance	E002	08/10/2023	Molybdenum, total	0.0006 J	mg/L
G315	Compliance	E002	08/10/2023	Oxidation Reduction Potential	98.0	mV
G315	Compliance	E002	08/10/2023	pH (field)	6.7	SU
G315	Compliance	E002	08/10/2023	Radium 226 + Radium 228, total	0.581	pCi/L
G315	Compliance	E002	08/10/2023	Selenium, total	0.0006 U	mg/L
G315	Compliance	E002	08/10/2023	Specific Conductance @ 25C (field)	2,600	micromhos/cm
G315	Compliance	E002	08/10/2023	Sulfate, total	603	mg/L
G315	Compliance	E002	08/10/2023	Temperature	16.1	degrees C
G315	Compliance	E002	08/10/2023	Thallium, total	0.001 U	mg/L
G315	Compliance	E002	08/10/2023	Total Dissolved Solids	1,190	mg/L
G315	Compliance	E002	08/10/2023	Turbidity, field	9.20	NTU
G316	Compliance	E002	08/09/2023	Antimony, total	0.0005 J	mg/L
G316	Compliance	E002	08/09/2023	Arsenic, total	0.00950	mg/L
G316	Compliance	E002	08/09/2023	Barium, total	0.0743	mg/L
G316	Compliance	E002	08/09/2023	Beryllium, total	0.0003 U	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
G316	Compliance	E002	08/09/2023	Boron, total	0.441 J+	mg/L
G316	Compliance	E002	08/09/2023	Cadmium, total	0.0002 U	mg/L
G316	Compliance	E002	08/09/2023	Calcium, total	203	mg/L
G316	Compliance	E002	08/09/2023	Chloride, total	26.0	mg/L
G316	Compliance	E002	08/09/2023	Chromium, total	0.0007 U	mg/L
G316	Compliance	E002	08/09/2023	Cobalt, total	0.00280	mg/L
G316	Compliance	E002	08/09/2023	Dissolved Oxygen	0.530	mg/L
G316	Compliance	E002	08/09/2023	Fluoride, total	0.280 J+	mg/L
G316	Compliance	E002	08/09/2023	Lead, total	0.0006 U	mg/L
G316	Compliance	E002	08/09/2023	Lithium, total	0.0017 J	mg/L
G316	Compliance	E002	08/09/2023	Mercury, total	0.00006 U	mg/L
G316	Compliance	E002	08/09/2023	Molybdenum, total	0.00440	mg/L
G316	Compliance	E002	08/09/2023	Oxidation Reduction Potential	-114	mV
G316	Compliance	E002	08/09/2023	pH (field)	6.7	SU
G316	Compliance	E002	08/09/2023	Radium 226 + Radium 228, total	0.662	pCi/L
G316	Compliance	E002	08/09/2023	Selenium, total	0.0006 U	mg/L
G316	Compliance	E002	08/09/2023	Specific Conductance @ 25C (field)	3,740	micromhos/cm
G316	Compliance	E002	08/09/2023	Sulfate, total	662	mg/L
G316	Compliance	E002	08/09/2023	Temperature	16.1	degrees C
G316	Compliance	E002	08/09/2023	Thallium, total	0.001 U	mg/L
G316	Compliance	E002	08/09/2023	Total Dissolved Solids	1,620	mg/L
G316	Compliance	E002	08/09/2023	Turbidity, field	9.90	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.

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 2, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G301	UA	E001	Antimony, total	mg/L	11/20/15 - 06/06/23	15	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G301	UA	E001	Arsenic, total	mg/L	11/20/15 - 06/06/23	20	60	CI around median	0.001	0.010	Standard	No Exceedance
G301	UA	E001	Barium, total	mg/L	11/20/15 - 06/06/23	20	0	CB around T-S line	-0.0129	2.0	Standard	No Exceedance
G301	UA	E001	Beryllium, total	mg/L	11/20/15 - 06/06/23	19	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G301	UA	E001	Boron, total	mg/L	11/20/15 - 06/06/23	21	0	CI around mean	2.13	3.20	Background	No Exceedance
G301	UA	E001	Cadmium, total	mg/L	11/20/15 - 06/06/23	20	95	CI around median	0.001	0.005	Standard	No Exceedance
G301	UA	E001	Chloride, total	mg/L	11/20/15 - 06/06/23	21	0	CB around linear reg	8.36	200	Standard	No Exceedance
G301	UA	E001	Chromium, total	mg/L	11/20/15 - 06/06/23	20	60	CI around median	0.004	0.1	Standard	No Exceedance
G301	UA	E001	Cobalt, total	mg/L	11/20/15 - 06/06/23	20	35	CI around median	0.002	0.006	Standard	No Exceedance
G301	UA	E001	Fluoride, total	mg/L	11/20/15 - 06/06/23	21	38	CI around median	0.25	4.0	Standard	No Exceedance
G301	UA	E001	Lead, total	mg/L	11/20/15 - 06/06/23	20	45	CI around median	0.001	0.0075	Standard	No Exceedance
G301	UA	E001	Lithium, total	mg/L	11/20/15 - 06/06/23	20	65	CB around T-S line	0.01	0.04	Standard	No Exceedance
G301	UA	E001	Mercury, total	mg/L	11/20/15 - 06/06/23	15	93	CI around median	0.0002	0.002	Standard	No Exceedance
G301	UA	E001	Molybdenum, total	mg/L	11/20/15 - 06/06/23	20	100	All ND - Last	0.001	0.1	Standard	No Exceedance
G301	UA	E001	pH (field)	SU	11/20/15 - 06/06/23	21	0	CI around mean	6.7/6.9	6.5/9.0	Standard/Standard	No Exceedance
G301	UA	E001	Radium 226 + Radium 228, total	pCi/L	11/20/15 - 06/06/23	20	0	CI around mean	0.527	5	Standard	No Exceedance
G301	UA	E001	Selenium, total	mg/L	11/20/15 - 06/06/23	19	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G301	UA	E001	Sulfate, total	mg/L	11/20/15 - 06/06/23	21	0	CI around mean	664	400	Standard	Exceedance
G301	UA	E001	Thallium, total	mg/L	11/20/15 - 06/06/23	15	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G301	UA	E001	Total Dissolved Solids	mg/L	11/20/15 - 06/06/23	21	0	CI around mean	1,090	1,200	Standard	No Exceedance
G302	UA	E001	Antimony, total	mg/L	11/20/15 - 05/31/23	15	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G302	UA	E001	Arsenic, total	mg/L	11/20/15 - 05/31/23	20	25	CI around geomean	0.00123	0.010	Standard	No Exceedance
G302	UA	E001	Barium, total	mg/L	11/20/15 - 05/31/23	20	0	CI around geomean	0.0279	2.0	Standard	No Exceedance
G302	UA	E001	Beryllium, total	mg/L	11/20/15 - 05/31/23	19	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G302	UA	E001	Boron, total	mg/L	11/20/15 - 05/31/23	21	0	CI around mean	1.59	3.20	Background	No Exceedance
G302	UA	E001	Cadmium, total	mg/L	11/20/15 - 05/31/23	20	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G302	UA	E001	Chloride, total	mg/L	11/20/15 - 05/31/23	21	5	CI around mean	11.3	200	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 2, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G302	UA	E001	Chromium, total	mg/L	11/20/15 - 05/31/23	20	65	CI around median	0.004	0.1	Standard	No Exceedance
G302	UA	E001	Cobalt, total	mg/L	11/20/15 - 05/31/23	20	30	CI around median	0.002	0.006	Standard	No Exceedance
G302	UA	E001	Fluoride, total	mg/L	11/20/15 - 05/31/23	21	38	CI around median	0.25	4.0	Standard	No Exceedance
G302	UA	E001	Lead, total	mg/L	11/20/15 - 05/31/23	20	55	CI around median	0.001	0.0075	Standard	No Exceedance
G302	UA	E001	Lithium, total	mg/L	11/20/15 - 05/31/23	20	35	CI around mean	0.0142	0.04	Standard	No Exceedance
G302	UA	E001	Mercury, total	mg/L	11/20/15 - 05/31/23	15	93	CI around median	0.0002	0.002	Standard	No Exceedance
G302	UA	E001	Molybdenum, total	mg/L	11/20/15 - 05/31/23	20	45	CI around median	0.001	0.1	Standard	No Exceedance
G302	UA	E001	pH (field)	SU	11/20/15 - 05/31/23	21	0	CI around mean	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance
G302	UA	E001	Radium 226 + Radium 228, total	pCi/L	11/20/15 - 05/31/23	20	0	CI around geomean	0.346	5	Standard	No Exceedance
G302	UA	E001	Selenium, total	mg/L	11/20/15 - 05/31/23	19	95	CI around median	0.001	0.05	Standard	No Exceedance
G302	UA	E001	Sulfate, total	mg/L	11/20/15 - 05/31/23	21	0	CI around mean	369	400	Standard	No Exceedance
G302	UA	E001	Thallium, total	mg/L	11/20/15 - 05/31/23	15	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G302	UA	E001	Total Dissolved Solids	mg/L	11/20/15 - 05/31/23	21	0	CI around mean	950	1,200	Standard	No Exceedance
G303	UA	E001	Antimony, total	mg/L	11/20/15 - 05/31/23	15	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G303	UA	E001	Arsenic, total	mg/L	11/20/15 - 05/31/23	20	5	CB around linear reg	-0.00372	0.010	Standard	No Exceedance
G303	UA	E001	Barium, total	mg/L	11/20/15 - 05/31/23	20	0	CI around median	0.015	2.0	Standard	No Exceedance
G303	UA	E001	Beryllium, total	mg/L	11/20/15 - 05/31/23	19	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G303	UA	E001	Boron, total	mg/L	11/20/15 - 05/31/23	21	0	CI around mean	1.72	3.20	Background	No Exceedance
G303	UA	E001	Cadmium, total	mg/L	11/20/15 - 05/31/23	20	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G303	UA	E001	Chloride, total	mg/L	11/20/15 - 05/31/23	21	0	CI around mean	28	200	Standard	No Exceedance
G303	UA	E001	Chromium, total	mg/L	11/20/15 - 05/31/23	20	90	CI around median	0.004	0.1	Standard	No Exceedance
G303	UA	E001	Cobalt, total	mg/L	11/20/15 - 05/31/23	20	35	CI around geomean	0.00238	0.006	Standard	No Exceedance
G303	UA	E001	Fluoride, total	mg/L	11/20/15 - 05/31/23	21	24	CI around mean	0.263	4.0	Standard	No Exceedance
G303	UA	E001	Lead, total	mg/L	11/20/15 - 05/31/23	20	90	CI around median	0.001	0.0075	Standard	No Exceedance
G303	UA	E001	Lithium, total	mg/L	11/20/15 - 05/31/23	20	0	CB around linear reg	0.00873	0.04	Standard	No Exceedance
G303	UA	E001	Mercury, total	mg/L	11/20/15 - 05/31/23	15	87	CI around median	0.0002	0.002	Standard	No Exceedance
G303	UA	E001	Molybdenum, total	mg/L	11/20/15 - 05/31/23	20	0	CB around linear reg	0.000967	0.1	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 2, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G303	UA	E001	pH (field)	SU	11/20/15 - 05/31/23	21	0	CI around mean	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance
G303	UA	E001	Radium 226 + Radium 228, total	pCi/L	11/20/15 - 05/31/23	20	0	CI around mean	0.538	5	Standard	No Exceedance
G303	UA	E001	Selenium, total	mg/L	11/20/15 - 05/31/23	19	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G303	UA	E001	Sulfate, total	mg/L	11/20/15 - 05/31/23	21	0	CI around mean	708	400	Standard	Exceedance
G303	UA	E001	Thallium, total	mg/L	11/20/15 - 05/31/23	15	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G303	UA	E001	Total Dissolved Solids	mg/L	11/20/15 - 05/31/23	21	0	CI around mean	1,510	1,200	Standard	Exceedance
G305	UA	E001	Antimony, total	mg/L	05/19/16 - 06/06/23	7	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G305	UA	E001	Arsenic, total	mg/L	05/19/16 - 06/06/23	7	43	CI around geomean	0.000741	0.010	Standard	No Exceedance
G305	UA	E001	Barium, total	mg/L	05/19/16 - 06/06/23	7	0	CI around mean	0.0241	2.0	Standard	No Exceedance
G305	UA	E001	Beryllium, total	mg/L	05/19/16 - 06/06/23	7	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G305	UA	E001	Boron, total	mg/L	05/19/16 - 06/06/23	7	0	CI around mean	1.84	3.20	Background	No Exceedance
G305	UA	E001	Cadmium, total	mg/L	05/19/16 - 06/06/23	7	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G305	UA	E001	Chloride, total	mg/L	05/19/16 - 06/06/23	7	0	CI around geomean	19.7	200	Standard	No Exceedance
G305	UA	E001	Chromium, total	mg/L	05/19/16 - 06/06/23	7	43	CI around mean	0.000287	0.1	Standard	No Exceedance
G305	UA	E001	Cobalt, total	mg/L	05/19/16 - 06/06/23	7	57	CI around median	0.002	0.006	Standard	No Exceedance
G305	UA	E001	Fluoride, total	mg/L	05/19/16 - 06/06/23	7	0	CI around mean	0.294	4.0	Standard	No Exceedance
G305	UA	E001	Lead, total	mg/L	05/19/16 - 06/06/23	7	0	CI around geomean	0.0011	0.0075	Standard	No Exceedance
G305	UA	E001	Lithium, total	mg/L	05/19/16 - 06/06/23	7	57	CI around median	0.01	0.04	Standard	No Exceedance
G305	UA	E001	Mercury, total	mg/L	05/19/16 - 06/06/23	7	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G305	UA	E001	Molybdenum, total	mg/L	05/19/16 - 06/06/23	7	43	CI around mean	0.00061	0.1	Standard	No Exceedance
G305	UA	E001	pH (field)	SU	05/19/16 - 06/06/23	7	0	CI around mean	7.0/7.4	6.5/9.0	Standard/Standard	No Exceedance
G305	UA	E001	Radium 226 + Radium 228, total	pCi/L	05/19/16 - 06/06/23	7	0	CI around mean	0.428	5	Standard	No Exceedance
G305	UA	E001	Selenium, total	mg/L	05/19/16 - 06/06/23	7	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G305	UA	E001	Sulfate, total	mg/L	05/19/16 - 06/06/23	7	0	CI around mean	787	400	Standard	Exceedance
G305	UA	E001	Thallium, total	mg/L	05/19/16 - 06/06/23	7	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G305	UA	E001	Total Dissolved Solids	mg/L	05/19/16 - 06/06/23	7	0	CI around mean	1,280	1,200	Standard	Exceedance
G307	UA	E001	Antimony, total	mg/L	08/16/16 - 06/05/23	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 2, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G307	UA	E001	Arsenic, total	mg/L	08/16/16 - 06/05/23	17	59	CI around median	0.001	0.010	Standard	No Exceedance
G307	UA	E001	Barium, total	mg/L	08/16/16 - 06/05/23	17	0	CI around geomean	0.0286	2.0	Standard	No Exceedance
G307	UA	E001	Beryllium, total	mg/L	08/16/16 - 06/05/23	16	94	CI around median	0.001	0.004	Standard	No Exceedance
G307	UA	E001	Boron, total	mg/L	08/16/16 - 06/05/23	18	0	CI around mean	1.99	3.20	Background	No Exceedance
G307	UA	E001	Cadmium, total	mg/L	08/16/16 - 06/05/23	17	53	CI around median	0.001	0.005	Standard	No Exceedance
G307	UA	E001	Chloride, total	mg/L	08/16/16 - 06/05/23	18	0	CB around linear reg	8.33	200	Standard	No Exceedance
G307	UA	E001	Chromium, total	mg/L	08/16/16 - 06/05/23	17	53	CI around median	0.004	0.1	Standard	No Exceedance
G307	UA	E001	Cobalt, total	mg/L	08/16/16 - 06/05/23	18	0	CI around median	0.0026	0.006	Standard	No Exceedance
G307	UA	E001	Fluoride, total	mg/L	08/16/16 - 06/05/23	18	6	CI around median	0.299	4.0	Standard	No Exceedance
G307	UA	E001	Lead, total	mg/L	08/16/16 - 06/05/23	17	41	CI around median	0.001	0.0075	Standard	No Exceedance
G307	UA	E001	Lithium, total	mg/L	08/16/16 - 06/05/23	17	53	CI around median	0.012	0.04	Standard	No Exceedance
G307	UA	E001	Mercury, total	mg/L	08/16/16 - 06/05/23	12	92	CI around median	0.0002	0.002	Standard	No Exceedance
G307	UA	E001	Molybdenum, total	mg/L	08/16/16 - 06/05/23	17	6	CI around geomean	0.00112	0.1	Standard	No Exceedance
G307	UA	E001	pH (field)	SU	08/16/16 - 06/05/23	19	0	CB around linear reg	7.1/7.4	6.5/9.0	Standard/Standard	No Exceedance
G307	UA	E001	Radium 226 + Radium 228, total	pCi/L	08/16/16 - 06/05/23	17	0	CI around mean	0.524	5	Standard	No Exceedance
G307	UA	E001	Selenium, total	mg/L	08/16/16 - 06/05/23	16	81	CI around median	0.001	0.05	Standard	No Exceedance
G307	UA	E001	Sulfate, total	mg/L	08/16/16 - 06/05/23	18	0	CB around linear reg	513	400	Standard	Exceedance
G307	UA	E001	Thallium, total	mg/L	08/16/16 - 06/05/23	12	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G307	UA	E001	Total Dissolved Solids	mg/L	08/16/16 - 06/05/23	18	0	CB around linear reg	1,030	1,200	Standard	No Exceedance
G307D	LCU	E001	Antimony, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G307D	LCU	E001	Arsenic, total	mg/L	03/29/21 - 06/05/23	7	29	CI around median	0.001	0.010	Standard	No Exceedance
G307D	LCU	E001	Barium, total	mg/L	03/29/21 - 06/05/23	7	0	CI around mean	0.0318	2.0	Standard	No Exceedance
G307D	LCU	E001	Beryllium, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G307D	LCU	E001	Boron, total	mg/L	03/29/21 - 06/05/23	7	0	CI around mean	1.25	3.20	Background	No Exceedance
G307D	LCU	E001	Cadmium, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G307D	LCU	E001	Chloride, total	mg/L	03/29/21 - 06/05/23	6	0	CI around mean	14.5	200	Standard	No Exceedance
G307D	LCU	E001	Chromium, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.004	0.1	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 2, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G307D	LCU	E001	Cobalt, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.002	0.006	Standard	No Exceedance
G307D	LCU	E001	Fluoride, total	mg/L	03/29/21 - 06/05/23	6	0	CI around mean	0.464	4.0	Standard	No Exceedance
G307D	LCU	E001	Lead, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.001	0.0075	Standard	No Exceedance
G307D	LCU	E001	Lithium, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G307D	LCU	E001	Mercury, total	mg/L	03/29/21 - 06/05/23	7	86	CI around median	0.0002	0.002	Standard	No Exceedance
G307D	LCU	E001	Molybdenum, total	mg/L	03/29/21 - 06/05/23	7	0	CI around mean	0.00629	0.1	Standard	No Exceedance
G307D	LCU	E001	pH (field)	SU	03/29/21 - 06/05/23	7	0	CI around mean	7.2/7.3	6.5/9.0	Standard/Standard	No Exceedance
G307D	LCU	E001	Radium 226 + Radium 228, total	pCi/L	03/29/21 - 06/05/23	8	0	CI around mean	0.113	5	Standard	No Exceedance
G307D	LCU	E001	Selenium, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G307D	LCU	E001	Sulfate, total	mg/L	03/29/21 - 06/05/23	6	0	CI around mean	622	400	Standard	Exceedance
G307D	LCU	E001	Thallium, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G307D	LCU	E001	Total Dissolved Solids	mg/L	03/29/21 - 06/05/23	6	0	CI around mean	1,110	1,200	Standard	No Exceedance
G308	UA	E001	Antimony, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G308	UA	E001	Arsenic, total	mg/L	03/29/21 - 06/01/23	10	90	CI around median	0.001	0.010	Standard	No Exceedance
G308	UA	E001	Barium, total	mg/L	03/29/21 - 06/01/23	10	0	CI around mean	0.0202	2.0	Standard	No Exceedance
G308	UA	E001	Beryllium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G308	UA	E001	Boron, total	mg/L	03/29/21 - 06/01/23	10	0	CI around mean	2.42	3.20	Background	No Exceedance
G308	UA	E001	Cadmium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G308	UA	E001	Chloride, total	mg/L	03/29/21 - 06/01/23	10	10	CI around median	17	200	Standard	No Exceedance
G308	UA	E001	Chromium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.004	0.1	Standard	No Exceedance
G308	UA	E001	Cobalt, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.002	0.006	Standard	No Exceedance
G308	UA	E001	Fluoride, total	mg/L	03/29/21 - 06/01/23	10	10	CI around geomean	0.475	4.0	Standard	No Exceedance
G308	UA	E001	Lead, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.0075	Standard	No Exceedance
G308	UA	E001	Lithium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G308	UA	E001	Mercury, total	mg/L	03/29/21 - 06/01/23	10	90	CI around median	0.0002	0.002	Standard	No Exceedance
G308	UA	E001	Molybdenum, total	mg/L	03/29/21 - 06/01/23	10	10	CI around median	0.0012	0.1	Standard	No Exceedance
G308	UA	E001	pH (field)	SU	03/29/21 - 06/01/23	10	0	CI around mean	7.2/7.3	6.5/9.0	Standard/Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 2, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G308	UA	E001	Radium 226 + Radium 228, total	pCi/L	03/29/21 - 06/01/23	9	0	CI around mean	0.0429	5	Standard	No Exceedance
G308	UA	E001	Selenium, total	mg/L	03/29/21 - 06/01/23	10	90	CI around median	0.001	0.05	Standard	No Exceedance
G308	UA	E001	Sulfate, total	mg/L	03/29/21 - 06/01/23	10	0	CI around mean	1,030	400	Standard	Exceedance
G308	UA	E001	Thallium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G308	UA	E001	Total Dissolved Solids	mg/L	03/29/21 - 06/01/23	10	0	CI around mean	1,810	1,200	Standard	Exceedance
G310	UA	E001	Antimony, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G310	UA	E001	Arsenic, total	mg/L	03/29/21 - 06/01/23	10	90	CI around median	0.001	0.010	Standard	No Exceedance
G310	UA	E001	Barium, total	mg/L	03/29/21 - 06/01/23	10	0	CI around mean	0.0148	2.0	Standard	No Exceedance
G310	UA	E001	Beryllium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G310	UA	E001	Boron, total	mg/L	03/29/21 - 06/01/23	10	0	CI around mean	1.66	3.20	Background	No Exceedance
G310	UA	E001	Cadmium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G310	UA	E001	Chloride, total	mg/L	03/29/21 - 06/01/23	10	0	CI around mean	16.7	200	Standard	No Exceedance
G310	UA	E001	Chromium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.004	0.1	Standard	No Exceedance
G310	UA	E001	Cobalt, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.002	0.006	Standard	No Exceedance
G310	UA	E001	Fluoride, total	mg/L	03/29/21 - 06/01/23	10	20	CI around mean	0.256	4.0	Standard	No Exceedance
G310	UA	E001	Lead, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.0075	Standard	No Exceedance
G310	UA	E001	Lithium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G310	UA	E001	Mercury, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G310	UA	E001	Molybdenum, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.1	Standard	No Exceedance
G310	UA	E001	pH (field)	SU	03/29/21 - 06/01/23	10	0	CI around mean	7.1/7.2	6.5/9.0	Standard/Standard	No Exceedance
G310	UA	E001	Radium 226 + Radium 228, total	pCi/L	03/29/21 - 06/01/23	9	0	CI around mean	-0.0304	5	Standard	No Exceedance
G310	UA	E001	Selenium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G310	UA	E001	Sulfate, total	mg/L	03/29/21 - 06/01/23	10	0	CI around geomean	553	400	Standard	Exceedance
G310	UA	E001	Thallium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G310	UA	E001	Total Dissolved Solids	mg/L	03/29/21 - 06/01/23	10	0	CI around median	1,100	1,200	Standard	No Exceedance
G312	UA	E001	Antimony, total	mg/L	03/30/21 - 06/01/23	9	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G312	UA	E001	Arsenic, total	mg/L	03/30/21 - 06/01/23	9	89	CI around median	0.001	0.010	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 2, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G312	UA	E001	Barium, total	mg/L	03/30/21 - 06/01/23	9	0	CI around mean	0.0239	2.0	Standard	No Exceedance
G312	UA	E001	Beryllium, total	mg/L	03/30/21 - 06/01/23	9	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G312	UA	E001	Boron, total	mg/L	03/30/21 - 06/01/23	9	0	CI around geomean	1.32	3.20	Background	No Exceedance
G312	UA	E001	Cadmium, total	mg/L	03/30/21 - 06/01/23	9	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G312	UA	E001	Chloride, total	mg/L	03/30/21 - 06/01/23	9	0	CI around mean	21.3	200	Standard	No Exceedance
G312	UA	E001	Chromium, total	mg/L	03/30/21 - 06/01/23	9	100	All ND - Last	0.004	0.1	Standard	No Exceedance
G312	UA	E001	Cobalt, total	mg/L	03/30/21 - 06/01/23	9	33	CI around mean	0.00214	0.006	Standard	No Exceedance
G312	UA	E001	Fluoride, total	mg/L	03/30/21 - 06/01/23	9	89	CI around median	0.25	4.0	Standard	No Exceedance
G312	UA	E001	Lead, total	mg/L	03/30/21 - 06/01/23	9	100	All ND - Last	0.001	0.0075	Standard	No Exceedance
G312	UA	E001	Lithium, total	mg/L	03/30/21 - 06/01/23	9	78	CI around median	0.02	0.04	Standard	No Exceedance
G312	UA	E001	Mercury, total	mg/L	03/30/21 - 06/01/23	9	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G312	UA	E001	Molybdenum, total	mg/L	03/30/21 - 06/01/23	9	89	CI around median	0.001	0.1	Standard	No Exceedance
G312	UA	E001	pH (field)	SU	03/30/21 - 06/01/23	9	0	CI around mean	6.4/6.5	6.5/9.0	Standard/Standard	No Exceedance
G312	UA	E001	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 06/01/23	8	0	CB around linear reg	-0.543	5	Standard	No Exceedance
G312	UA	E001	Selenium, total	mg/L	03/30/21 - 06/01/23	9	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G312	UA	E001	Sulfate, total	mg/L	03/30/21 - 06/01/23	9	0	CI around mean	696	400	Standard	Exceedance
G312	UA	E001	Thallium, total	mg/L	03/30/21 - 06/01/23	9	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G312	UA	E001	Total Dissolved Solids	mg/L	03/30/21 - 06/01/23	9	0	CI around mean	1,460	1,200	Standard	Exceedance
G313	UA	E001	Antimony, total	mg/L	03/30/21 - 06/06/23	10	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G313	UA	E001	Arsenic, total	mg/L	03/30/21 - 06/06/23	10	80	CI around median	0.001	0.010	Standard	No Exceedance
G313	UA	E001	Barium, total	mg/L	03/30/21 - 06/06/23	10	0	CB around linear reg	0.0125	2.0	Standard	No Exceedance
G313	UA	E001	Beryllium, total	mg/L	03/30/21 - 06/06/23	10	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G313	UA	E001	Boron, total	mg/L	03/30/21 - 06/06/23	10	0	CI around mean	3.28	3.20	Background	Exceedance
G313	UA	E001	Cadmium, total	mg/L	03/30/21 - 06/06/23	10	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G313	UA	E001	Chloride, total	mg/L	03/30/21 - 06/06/23	10	10	CI around median	23	200	Standard	No Exceedance
G313	UA	E001	Chromium, total	mg/L	03/30/21 - 06/06/23	10	100	All ND - Last	0.004	0.1	Standard	No Exceedance
G313	UA	E001	Cobalt, total	mg/L	03/30/21 - 06/06/23	10	80	CI around median	0.002	0.006	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 2, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G313	UA	E001	Fluoride, total	mg/L	03/30/21 - 06/06/23	10	10	CI around mean	0.217	4.0	Standard	No Exceedance
G313	UA	E001	Lead, total	mg/L	03/30/21 - 06/06/23	10	100	All ND - Last	0.001	0.0075	Standard	No Exceedance
G313	UA	E001	Lithium, total	mg/L	03/30/21 - 06/06/23	10	50	CI around median	0.02	0.04	Standard	No Exceedance
G313	UA	E001	Mercury, total	mg/L	03/30/21 - 06/06/23	10	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G313	UA	E001	Molybdenum, total	mg/L	03/30/21 - 06/06/23	10	10	CI around median	0.0011	0.1	Standard	No Exceedance
G313	UA	E001	pH (field)	SU	03/30/21 - 06/06/23	10	0	CI around mean	6.9/7.0	6.5/9.0	Standard/Standard	No Exceedance
G313	UA	E001	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 06/06/23	9	0	CI around mean	0.172	5	Standard	No Exceedance
G313	UA	E001	Selenium, total	mg/L	03/30/21 - 06/06/23	10	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G313	UA	E001	Sulfate, total	mg/L	03/30/21 - 06/06/23	10	0	CB around linear reg	491	400	Standard	Exceedance
G313	UA	E001	Thallium, total	mg/L	03/30/21 - 06/06/23	10	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G313	UA	E001	Total Dissolved Solids	mg/L	03/30/21 - 06/06/23	10	0	CI around median	1,600	1,200	Standard	Exceedance
G314	LCU	E001	Antimony, total	mg/L	03/30/21 - 06/01/23	10	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G314	LCU	E001	Arsenic, total	mg/L	03/30/21 - 06/01/23	10	70	CI around median	0.001	0.010	Standard	No Exceedance
G314	LCU	E001	Barium, total	mg/L	03/30/21 - 06/01/23	10	0	CI around mean	0.0185	2.0	Standard	No Exceedance
G314	LCU	E001	Beryllium, total	mg/L	03/30/21 - 06/01/23	10	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G314	LCU	E001	Boron, total	mg/L	03/30/21 - 06/01/23	10	0	CI around mean	0.123	3.20	Background	No Exceedance
G314	LCU	E001	Cadmium, total	mg/L	03/30/21 - 06/01/23	10	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G314	LCU	E001	Chloride, total	mg/L	03/30/21 - 06/01/23	10	0	CI around median	30	200	Standard	No Exceedance
G314	LCU	E001	Chromium, total	mg/L	03/30/21 - 06/01/23	10	90	CI around median	0.004	0.1	Standard	No Exceedance
G314	LCU	E001	Cobalt, total	mg/L	03/30/21 - 06/01/23	10	10	CI around mean	0.00285	0.006	Standard	No Exceedance
G314	LCU	E001	Fluoride, total	mg/L	03/30/21 - 06/01/23	10	100	All ND - Last	0.25	4.0	Standard	No Exceedance
G314	LCU	E001	Lead, total	mg/L	03/30/21 - 06/01/23	10	80	CI around median	0.001	0.0075	Standard	No Exceedance
G314	LCU	E001	Lithium, total	mg/L	03/30/21 - 06/01/23	10	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G314	LCU	E001	Mercury, total	mg/L	03/30/21 - 06/01/23	10	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G314	LCU	E001	Molybdenum, total	mg/L	03/30/21 - 06/01/23	10	0	CB around linear reg	-0.00569	0.1	Standard	No Exceedance
G314	LCU	E001	pH (field)	SU	03/30/21 - 06/01/23	10	0	CI around mean	6.6/6.9	6.5/9.0	Standard/Standard	No Exceedance
G314	LCU	E001	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 06/01/23	9	0	CI around mean	0.42	5	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 2, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G314	LCU	E001	Selenium, total	mg/L	03/30/21 - 06/01/23	10	80	CI around median	0.001	0.05	Standard	No Exceedance
G314	LCU	E001	Sulfate, total	mg/L	03/30/21 - 06/01/23	10	0	CI around median	2,000	400	Standard	Exceedance
G314	LCU	E001	Thallium, total	mg/L	03/30/21 - 06/01/23	10	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G314	LCU	E001	Total Dissolved Solids	mg/L	03/30/21 - 06/01/23	10	0	CI around median	3,400	1,200	Standard	Exceedance
G314D	DA	E001	Antimony, total	mg/L	03/30/21 - 06/01/23	7	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G314D	DA	E001	Arsenic, total	mg/L	03/30/21 - 06/01/23	7	57	CI around median	0.001	0.010	Standard	No Exceedance
G314D	DA	E001	Barium, total	mg/L	03/30/21 - 06/01/23	7	0	CI around mean	0.0272	2.0	Standard	No Exceedance
G314D	DA	E001	Beryllium, total	mg/L	03/30/21 - 06/01/23	7	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G314D	DA	E001	Boron, total	mg/L	03/30/21 - 06/01/23	7	0	CI around mean	0.138	3.20	Background	No Exceedance
G314D	DA	E001	Cadmium, total	mg/L	03/30/21 - 06/01/23	7	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G314D	DA	E001	Chloride, total	mg/L	03/30/21 - 06/01/23	6	0	CI around mean	42.3	200	Standard	No Exceedance
G314D	DA	E001	Chromium, total	mg/L	03/30/21 - 06/01/23	7	100	All ND - Last	0.004	0.1	Standard	No Exceedance
G314D	DA	E001	Cobalt, total	mg/L	03/30/21 - 06/01/23	7	86	CI around median	0.002	0.006	Standard	No Exceedance
G314D	DA	E001	Fluoride, total	mg/L	03/30/21 - 06/01/23	6	0	CI around mean	0.491	4.0	Standard	No Exceedance
G314D	DA	E001	Lead, total	mg/L	03/30/21 - 06/01/23	7	71	CI around median	0.001	0.0075	Standard	No Exceedance
G314D	DA	E001	Lithium, total	mg/L	03/30/21 - 06/01/23	7	57	CI around median	0.02	0.04	Standard	No Exceedance
G314D	DA	E001	Mercury, total	mg/L	03/30/21 - 06/01/23	7	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G314D	DA	E001	Molybdenum, total	mg/L	03/30/21 - 06/01/23	7	0	CI around mean	0.00344	0.1	Standard	No Exceedance
G314D	DA	E001	pH (field)	SU	03/30/21 - 06/01/23	7	0	CI around mean	7.0/7.3	6.5/9.0	Standard/Standard	No Exceedance
G314D	DA	E001	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 06/01/23	7	0	CI around mean	1.5	5	Standard	No Exceedance
G314D	DA	E001	Selenium, total	mg/L	03/30/21 - 06/01/23	7	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G314D	DA	E001	Sulfate, total	mg/L	03/30/21 - 06/01/23	6	0	CI around mean	674	400	Standard	Exceedance
G314D	DA	E001	Thallium, total	mg/L	03/30/21 - 06/01/23	7	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G314D	DA	E001	Total Dissolved Solids	mg/L	03/30/21 - 06/01/23	6	0	CI around mean	1,640	1,200	Standard	Exceedance
G315	UA	E001	Antimony, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G315	UA	E001	Arsenic, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.001	0.010	Standard	No Exceedance
G315	UA	E001	Barium, total	mg/L	03/30/21 - 06/07/23	10	0	CI around mean	0.0211	2.0	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 2, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G315	UA	E001	Beryllium, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G315	UA	E001	Boron, total	mg/L	03/30/21 - 06/07/23	10	0	CI around median	1.2	3.20	Background	No Exceedance
G315	UA	E001	Cadmium, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G315	UA	E001	Chloride, total	mg/L	03/30/21 - 06/07/23	10	0	CI around median	12	200	Standard	No Exceedance
G315	UA	E001	Chromium, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.004	0.1	Standard	No Exceedance
G315	UA	E001	Cobalt, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.002	0.006	Standard	No Exceedance
G315	UA	E001	Fluoride, total	mg/L	03/30/21 - 06/07/23	10	0	CI around mean	0.259	4.0	Standard	No Exceedance
G315	UA	E001	Lead, total	mg/L	03/30/21 - 06/07/23	10	90	CI around median	0.001	0.0075	Standard	No Exceedance
G315	UA	E001	Lithium, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G315	UA	E001	Mercury, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G315	UA	E001	Molybdenum, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.001	0.1	Standard	No Exceedance
G315	UA	E001	pH (field)	SU	03/30/21 - 06/07/23	10	0	CI around mean	6.8/6.9	6.5/9.0	Standard/Standard	No Exceedance
G315	UA	E001	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 06/07/23	9	0	CI around mean	0.0593	5	Standard	No Exceedance
G315	UA	E001	Selenium, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G315	UA	E001	Sulfate, total	mg/L	03/30/21 - 06/07/23	10	0	CB around T-S line	-718	400	Standard	No Exceedance
G315	UA	E001	Thallium, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G315	UA	E001	Total Dissolved Solids	mg/L	03/30/21 - 06/07/23	10	0	CI around mean	1,320	1,200	Standard	Exceedance
G316	LCU	E001	Antimony, total	mg/L	03/30/21 - 05/31/23	10	100	All ND - Last	0.003	0.006	Standard	No Exceedance
G316	LCU	E001	Arsenic, total	mg/L	03/30/21 - 05/31/23	10	0	CI around mean	0.0067	0.010	Standard	No Exceedance
G316	LCU	E001	Barium, total	mg/L	03/30/21 - 05/31/23	10	0	CI around mean	0.0614	2.0	Standard	No Exceedance
G316	LCU	E001	Beryllium, total	mg/L	03/30/21 - 05/31/23	10	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G316	LCU	E001	Boron, total	mg/L	03/30/21 - 05/31/23	10	0	CI around mean	0.353	3.20	Background	No Exceedance
G316	LCU	E001	Cadmium, total	mg/L	03/30/21 - 05/31/23	10	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G316	LCU	E001	Chloride, total	mg/L	03/30/21 - 05/31/23	10	0	CI around median	23	200	Standard	No Exceedance
G316	LCU	E001	Chromium, total	mg/L	03/30/21 - 05/31/23	10	100	All ND - Last	0.004	0.1	Standard	No Exceedance
G316	LCU	E001	Cobalt, total	mg/L	03/30/21 - 05/31/23	10	0	CB around linear reg	0.00204	0.006	Standard	No Exceedance
G316	LCU	E001	Fluoride, total	mg/L	03/30/21 - 05/31/23	10	60	CI around median	0.25	4.0	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 2, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G316	LCU	E001	Lead, total	mg/L	03/30/21 - 05/31/23	10	90	CI around median	0.001	0.0075	Standard	No Exceedance
G316	LCU	E001	Lithium, total	mg/L	03/30/21 - 05/31/23	10	100	All ND - Last	0.02	0.04	Standard	No Exceedance
G316	LCU	E001	Mercury, total	mg/L	03/30/21 - 05/31/23	10	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G316	LCU	E001	Molybdenum, total	mg/L	03/30/21 - 05/31/23	10	0	CI around mean	0.00364	0.1	Standard	No Exceedance
G316	LCU	E001	pH (field)	SU	03/30/21 - 05/31/23	10	0	CI around mean	7.0/7.1	6.5/9.0	Standard/Standard	No Exceedance
G316	LCU	E001	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 05/31/23	9	0	CI around geomean	0.225	5	Standard	No Exceedance
G316	LCU	E001	Selenium, total	mg/L	03/30/21 - 05/31/23	10	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G316	LCU	E001	Sulfate, total	mg/L	03/30/21 - 05/31/23	10	0	CI around median	660	400	Standard	Exceedance
G316	LCU	E001	Thallium, total	mg/L	03/30/21 - 05/31/23	10	100	All ND - Last	0.001	0.002	Standard	No Exceedance
G316	LCU	E001	Total Dissolved Solids	mg/L	03/30/21 - 05/31/23	10	0	CI around median	1,600	1,200	Standard	Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 2, 2023
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COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Notes:
Compliance Result:

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

Exceedance: The statistical result exceeded the GWPS.

HSU = hydrostratigraphic unit:

DA = Deep Aquifer

LCU = Lower Confining Unit

UA = Uppermost Aquifer

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

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

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

CB around linear reg = Confidence band around linear regression

CI around geomean = Confidence interval around the geometric mean

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

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.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 3, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G301	UA	E002	Antimony, total	mg/L	11/20/15 - 08/09/23	16	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G301	UA	E002	Arsenic, total	mg/L	11/20/15 - 08/09/23	21	62	CI around median	0.001	0.010	Standard	No Exceedance
G301	UA	E002	Barium, total	mg/L	11/20/15 - 08/09/23	21	0	CB around T-S line	-0.0101	2.0	Standard	No Exceedance
G301	UA	E002	Beryllium, total	mg/L	11/20/15 - 08/09/23	20	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G301	UA	E002	Boron, total	mg/L	11/20/15 - 08/09/23	22	0	CB around linear reg	1.82	3.20	Background	No Exceedance
G301	UA	E002	Cadmium, total	mg/L	11/20/15 - 08/09/23	21	95	CI around median	0.001	0.005	Standard	No Exceedance
G301	UA	E002	Chloride, total	mg/L	11/20/15 - 08/09/23	22	0	CB around linear reg	8.44	200	Standard	No Exceedance
G301	UA	E002	Chromium, total	mg/L	11/20/15 - 08/09/23	21	62	CI around median	0.004	0.1	Standard	No Exceedance
G301	UA	E002	Cobalt, total	mg/L	11/20/15 - 08/09/23	21	33	CB around T-S line	0.000466	0.006	Standard	No Exceedance
G301	UA	E002	Fluoride, total	mg/L	11/20/15 - 08/09/23	22	36	CI around geomean	0.264	4.0	Standard	No Exceedance
G301	UA	E002	Lead, total	mg/L	11/20/15 - 08/09/23	21	48	CI around median	0.001	0.0075	Standard	No Exceedance
G301	UA	E002	Lithium, total	mg/L	11/20/15 - 08/09/23	21	62	CB around T-S line	0.01	0.04	Standard	No Exceedance
G301	UA	E002	Mercury, total	mg/L	11/20/15 - 08/09/23	16	94	CI around median	0.0002	0.002	Standard	No Exceedance
G301	UA	E002	Molybdenum, total	mg/L	11/20/15 - 08/09/23	21	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G301	UA	E002	pH (field)	SU	11/20/15 - 08/09/23	22	0	CI around mean	6.7/6.9	6.5/9.0	Standard/Standard	No Exceedance
G301	UA	E002	Radium 226 + Radium 228, total	pCi/L	11/20/15 - 08/09/23	21	0	CI around mean	0.552	5	Standard	No Exceedance
G301	UA	E002	Selenium, total	mg/L	11/20/15 - 08/09/23	20	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G301	UA	E002	Sulfate, total	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	652	400	Standard	Exceedance
G301	UA	E002	Thallium, total	mg/L	11/20/15 - 08/09/23	16	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G301	UA	E002	Total Dissolved Solids	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	1,080	1,200	Standard	No Exceedance
G302	UA	E002	Antimony, total	mg/L	11/20/15 - 08/09/23	16	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G302	UA	E002	Arsenic, total	mg/L	11/20/15 - 08/09/23	21	24	CI around geomean	0.00119	0.010	Standard	No Exceedance
G302	UA	E002	Barium, total	mg/L	11/20/15 - 08/09/23	21	0	CI around geomean	0.0278	2.0	Standard	No Exceedance
G302	UA	E002	Beryllium, total	mg/L	11/20/15 - 08/09/23	20	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G302	UA	E002	Boron, total	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	1.6	3.20	Background	No Exceedance
G302	UA	E002	Cadmium, total	mg/L	11/20/15 - 08/09/23	21	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G302	UA	E002	Chloride, total	mg/L	11/20/15 - 08/09/23	22	4	CI around mean	11.1	200	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 3, 2023
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COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G302	UA	E002	Chromium, total	mg/L	11/20/15 - 08/09/23	21	67	CI around median	0.004	0.1	Standard	No Exceedance
G302	UA	E002	Cobalt, total	mg/L	11/20/15 - 08/09/23	21	29	CI around median	0.002	0.006	Standard	No Exceedance
G302	UA	E002	Fluoride, total	mg/L	11/20/15 - 08/09/23	22	36	CI around median	0.25	4.0	Standard	No Exceedance
G302	UA	E002	Lead, total	mg/L	11/20/15 - 08/09/23	21	57	CI around median	0.001	0.0075	Standard	No Exceedance
G302	UA	E002	Lithium, total	mg/L	11/20/15 - 08/09/23	21	33	CI around mean	0.0128	0.04	Standard	No Exceedance
G302	UA	E002	Mercury, total	mg/L	11/20/15 - 08/09/23	16	94	CI around median	0.0002	0.002	Standard	No Exceedance
G302	UA	E002	Molybdenum, total	mg/L	11/20/15 - 08/09/23	21	48	CI around median	0.001	0.1	Standard	No Exceedance
G302	UA	E002	pH (field)	SU	11/20/15 - 08/09/23	22	0	CI around mean	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance
G302	UA	E002	Radium 226 + Radium 228, total	pCi/L	11/20/15 - 08/09/23	21	0	CI around geomean	0.362	5	Standard	No Exceedance
G302	UA	E002	Selenium, total	mg/L	11/20/15 - 08/09/23	20	95	CI around median	0.001	0.05	Standard	No Exceedance
G302	UA	E002	Sulfate, total	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	368	400	Standard	No Exceedance
G302	UA	E002	Thallium, total	mg/L	11/20/15 - 08/09/23	16	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G302	UA	E002	Total Dissolved Solids	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	952	1,200	Standard	No Exceedance
G303	UA	E002	Antimony, total	mg/L	11/20/15 - 08/09/23	16	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G303	UA	E002	Arsenic, total	mg/L	11/20/15 - 08/09/23	21	5	CB around linear reg	-0.00318	0.010	Standard	No Exceedance
G303	UA	E002	Barium, total	mg/L	11/20/15 - 08/09/23	21	0	CI around median	0.015	2.0	Standard	No Exceedance
G303	UA	E002	Beryllium, total	mg/L	11/20/15 - 08/09/23	20	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G303	UA	E002	Boron, total	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	1.73	3.20	Background	No Exceedance
G303	UA	E002	Cadmium, total	mg/L	11/20/15 - 08/09/23	21	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G303	UA	E002	Chloride, total	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	27.9	200	Standard	No Exceedance
G303	UA	E002	Chromium, total	mg/L	11/20/15 - 08/09/23	21	90	CI around median	0.004	0.1	Standard	No Exceedance
G303	UA	E002	Cobalt, total	mg/L	11/20/15 - 08/09/23	21	33	CI around geomean	0.00235	0.006	Standard	No Exceedance
G303	UA	E002	Fluoride, total	mg/L	11/20/15 - 08/09/23	22	23	CI around mean	0.263	4.0	Standard	No Exceedance
G303	UA	E002	Lead, total	mg/L	11/20/15 - 08/09/23	21	86	CI around median	0.001	0.0075	Standard	No Exceedance
G303	UA	E002	Lithium, total	mg/L	11/20/15 - 08/09/23	21	0	CB around linear reg	0.0117	0.04	Standard	No Exceedance
G303	UA	E002	Mercury, total	mg/L	11/20/15 - 08/09/23	16	88	CI around median	0.0002	0.002	Standard	No Exceedance
G303	UA	E002	Molybdenum, total	mg/L	11/20/15 - 08/09/23	21	0	CB around linear reg	0.00107	0.1	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 3, 2023
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COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G303	UA	E002	pH (field)	SU	11/20/15 - 08/09/23	22	0	CI around mean	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance
G303	UA	E002	Radium 226 + Radium 228, total	pCi/L	11/20/15 - 08/09/23	21	0	CI around mean	0.572	5	Standard	No Exceedance
G303	UA	E002	Selenium, total	mg/L	11/20/15 - 08/09/23	20	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G303	UA	E002	Sulfate, total	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	708	400	Standard	Exceedance
G303	UA	E002	Thallium, total	mg/L	11/20/15 - 08/09/23	16	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G303	UA	E002	Total Dissolved Solids	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	1,510	1,200	Standard	Exceedance
G305	UA	E002	Antimony, total	mg/L	05/19/16 - 08/10/23	8	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G305	UA	E002	Arsenic, total	mg/L	05/19/16 - 08/10/23	8	50	CI around median	0.001	0.010	Standard	No Exceedance
G305	UA	E002	Barium, total	mg/L	05/19/16 - 08/10/23	8	0	CI around mean	0.0236	2.0	Standard	No Exceedance
G305	UA	E002	Beryllium, total	mg/L	05/19/16 - 08/10/23	8	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G305	UA	E002	Boron, total	mg/L	05/19/16 - 08/10/23	8	0	CI around mean	1.93	3.20	Background	No Exceedance
G305	UA	E002	Cadmium, total	mg/L	05/19/16 - 08/10/23	8	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G305	UA	E002	Chloride, total	mg/L	05/19/16 - 08/10/23	8	0	CI around geomean	19.8	200	Standard	No Exceedance
G305	UA	E002	Chromium, total	mg/L	05/19/16 - 08/10/23	8	50	CI around mean	-0.00132	0.1	Standard	No Exceedance
G305	UA	E002	Cobalt, total	mg/L	05/19/16 - 08/10/23	8	62	CI around median	0.001	0.006	Standard	No Exceedance
G305	UA	E002	Fluoride, total	mg/L	05/19/16 - 08/10/23	8	0	CI around mean	0.323	4.0	Standard	No Exceedance
G305	UA	E002	Lead, total	mg/L	05/19/16 - 08/10/23	8	12	CI around geomean	0.000823	0.0075	Standard	No Exceedance
G305	UA	E002	Lithium, total	mg/L	05/19/16 - 08/10/23	8	50	CI around mean	0.00667	0.04	Standard	No Exceedance
G305	UA	E002	Mercury, total	mg/L	05/19/16 - 08/10/23	8	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G305	UA	E002	Molybdenum, total	mg/L	05/19/16 - 08/10/23	8	38	CI around mean	0.000776	0.1	Standard	No Exceedance
G305	UA	E002	pH (field)	SU	05/19/16 - 08/10/23	8	0	CI around mean	7.0/7.4	6.5/9.0	Standard/Standard	No Exceedance
G305	UA	E002	Radium 226 + Radium 228, total	pCi/L	05/19/16 - 08/10/23	8	0	CI around mean	0.443	5	Standard	No Exceedance
G305	UA	E002	Selenium, total	mg/L	05/19/16 - 08/10/23	8	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G305	UA	E002	Sulfate, total	mg/L	05/19/16 - 08/10/23	8	0	CI around mean	801	400	Standard	Exceedance
G305	UA	E002	Thallium, total	mg/L	05/19/16 - 08/10/23	8	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G305	UA	E002	Total Dissolved Solids	mg/L	05/19/16 - 08/10/23	8	0	CI around mean	1,320	1,200	Standard	Exceedance
G307D	LCU	E002	Antimony, total	mg/L	03/29/21 - 08/10/23	8	100	All ND - Last	0.001	0.006	Standard	No Exceedance

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ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G307D	LCU	E002	Arsenic, total	mg/L	03/29/21 - 08/10/23	8	25	CI around geomean	0.000772	0.010	Standard	No Exceedance
G307D	LCU	E002	Barium, total	mg/L	03/29/21 - 08/10/23	8	0	CB around linear reg	0.0154	2.0	Standard	No Exceedance
G307D	LCU	E002	Beryllium, total	mg/L	03/29/21 - 08/10/23	8	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G307D	LCU	E002	Boron, total	mg/L	03/29/21 - 08/10/23	8	0	CI around geomean	1.2	3.20	Background	No Exceedance
G307D	LCU	E002	Cadmium, total	mg/L	03/29/21 - 08/10/23	8	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G307D	LCU	E002	Chloride, total	mg/L	03/29/21 - 08/10/23	7	0	CI around mean	13.8	200	Standard	No Exceedance
G307D	LCU	E002	Chromium, total	mg/L	03/29/21 - 08/10/23	8	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G307D	LCU	E002	Cobalt, total	mg/L	03/29/21 - 08/10/23	8	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G307D	LCU	E002	Fluoride, total	mg/L	03/29/21 - 08/10/23	7	0	CI around mean	0.492	4.0	Standard	No Exceedance
G307D	LCU	E002	Lead, total	mg/L	03/29/21 - 08/10/23	8	100	All ND - Last	0.001	0.0075	Standard	No Exceedance
G307D	LCU	E002	Lithium, total	mg/L	03/29/21 - 08/10/23	8	88	CI around median	0.0032	0.04	Standard	No Exceedance
G307D	LCU	E002	Mercury, total	mg/L	03/29/21 - 08/10/23	8	88	CI around median	0.0002	0.002	Standard	No Exceedance
G307D	LCU	E002	Molybdenum, total	mg/L	03/29/21 - 08/10/23	8	0	CI around mean	0.00589	0.1	Standard	No Exceedance
G307D	LCU	E002	pH (field)	SU	03/29/21 - 08/10/23	8	0	CI around mean	7.2/7.3	6.5/9.0	Standard/Standard	No Exceedance
G307D	LCU	E002	Radium 226 + Radium 228, total	pCi/L	03/29/21 - 08/10/23	9	0	CI around mean	0.176	5	Standard	No Exceedance
G307D	LCU	E002	Selenium, total	mg/L	03/29/21 - 08/10/23	8	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G307D	LCU	E002	Sulfate, total	mg/L	03/29/21 - 08/10/23	7	0	CI around mean	602	400	Standard	Exceedance
G307D	LCU	E002	Thallium, total	mg/L	03/29/21 - 08/10/23	8	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G307D	LCU	E002	Total Dissolved Solids	mg/L	03/29/21 - 08/10/23	7	0	CI around mean	1,090	1,200	Standard	No Exceedance
G308	UA	E002	Antimony, total	mg/L	03/29/21 - 08/10/23	11	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G308	UA	E002	Arsenic, total	mg/L	03/29/21 - 08/10/23	11	91	CI around median	0.001	0.010	Standard	No Exceedance
G308	UA	E002	Barium, total	mg/L	03/29/21 - 08/10/23	11	0	CI around mean	0.0204	2.0	Standard	No Exceedance
G308	UA	E002	Beryllium, total	mg/L	03/29/21 - 08/10/23	11	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G308	UA	E002	Boron, total	mg/L	03/29/21 - 08/10/23	11	0	CI around mean	2.44	3.20	Background	No Exceedance
G308	UA	E002	Cadmium, total	mg/L	03/29/21 - 08/10/23	11	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G308	UA	E002	Chloride, total	mg/L	03/29/21 - 08/10/23	11	9	CI around median	14	200	Standard	No Exceedance
G308	UA	E002	Chromium, total	mg/L	03/29/21 - 08/10/23	11	100	All ND - Last	0.0015	0.1	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 3, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G308	UA	E002	Cobalt, total	mg/L	03/29/21 - 08/10/23	11	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G308	UA	E002	Fluoride, total	mg/L	03/29/21 - 08/10/23	11	9	CI around geomean	0.491	4.0	Standard	No Exceedance
G308	UA	E002	Lead, total	mg/L	03/29/21 - 08/10/23	11	100	All ND - Last	0.001	0.0075	Standard	No Exceedance
G308	UA	E002	Lithium, total	mg/L	03/29/21 - 08/10/23	11	91	CI around median	0.02	0.04	Standard	No Exceedance
G308	UA	E002	Mercury, total	mg/L	03/29/21 - 08/10/23	11	91	CI around median	0.0002	0.002	Standard	No Exceedance
G308	UA	E002	Molybdenum, total	mg/L	03/29/21 - 08/10/23	11	9	CI around median	0.0012	0.1	Standard	No Exceedance
G308	UA	E002	pH (field)	SU	03/29/21 - 08/10/23	11	0	CI around mean	7.2/7.3	6.5/9.0	Standard/Standard	No Exceedance
G308	UA	E002	Radium 226 + Radium 228, total	pCi/L	03/29/21 - 08/10/23	10	0	CI around mean	0.0822	5	Standard	No Exceedance
G308	UA	E002	Selenium, total	mg/L	03/29/21 - 08/10/23	11	91	CI around median	0.001	0.05	Standard	No Exceedance
G308	UA	E002	Sulfate, total	mg/L	03/29/21 - 08/10/23	11	0	CI around mean	1,020	400	Standard	Exceedance
G308	UA	E002	Thallium, total	mg/L	03/29/21 - 08/10/23	11	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G308	UA	E002	Total Dissolved Solids	mg/L	03/29/21 - 08/10/23	11	0	CI around mean	1,800	1,200	Standard	Exceedance
G310	UA	E002	Antimony, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G310	UA	E002	Arsenic, total	mg/L	03/29/21 - 08/09/23	11	91	CI around median	0.001	0.010	Standard	No Exceedance
G310	UA	E002	Barium, total	mg/L	03/29/21 - 08/09/23	11	0	CI around mean	0.0148	2.0	Standard	No Exceedance
G310	UA	E002	Beryllium, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G310	UA	E002	Boron, total	mg/L	03/29/21 - 08/09/23	11	0	CI around mean	1.68	3.20	Background	No Exceedance
G310	UA	E002	Cadmium, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G310	UA	E002	Chloride, total	mg/L	03/29/21 - 08/09/23	11	0	CI around mean	16.1	200	Standard	No Exceedance
G310	UA	E002	Chromium, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G310	UA	E002	Cobalt, total	mg/L	03/29/21 - 08/09/23	11	91	CI around median	0.002	0.006	Standard	No Exceedance
G310	UA	E002	Fluoride, total	mg/L	03/29/21 - 08/09/23	11	18	CI around mean	0.262	4.0	Standard	No Exceedance
G310	UA	E002	Lead, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.001	0.0075	Standard	No Exceedance
G310	UA	E002	Lithium, total	mg/L	03/29/21 - 08/09/23	11	91	CI around median	0.02	0.04	Standard	No Exceedance
G310	UA	E002	Mercury, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G310	UA	E002	Molybdenum, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G310	UA	E002	pH (field)	SU	03/29/21 - 08/09/23	11	0	CI around median	7.0/7.2	6.5/9.0	Standard/Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 3, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G310	UA	E002	Radium 226 + Radium 228, total	pCi/L	03/29/21 - 08/09/23	10	0	CI around mean	0.0482	5	Standard	No Exceedance
G310	UA	E002	Selenium, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G310	UA	E002	Sulfate, total	mg/L	03/29/21 - 08/09/23	11	0	CB around T-S line	-6,390	400	Standard	No Exceedance
G310	UA	E002	Thallium, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G310	UA	E002	Total Dissolved Solids	mg/L	03/29/21 - 08/09/23	11	0	CI around median	1,100	1,200	Standard	No Exceedance
G312	UA	E002	Antimony, total	mg/L	03/30/21 - 08/09/23	10	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G312	UA	E002	Arsenic, total	mg/L	03/30/21 - 08/09/23	10	90	CI around median	0.001	0.010	Standard	No Exceedance
G312	UA	E002	Barium, total	mg/L	03/30/21 - 08/09/23	10	0	CI around mean	0.0243	2.0	Standard	No Exceedance
G312	UA	E002	Beryllium, total	mg/L	03/30/21 - 08/09/23	10	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G312	UA	E002	Boron, total	mg/L	03/30/21 - 08/09/23	10	0	CI around geomean	1.38	3.20	Background	No Exceedance
G312	UA	E002	Cadmium, total	mg/L	03/30/21 - 08/09/23	10	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G312	UA	E002	Chloride, total	mg/L	03/30/21 - 08/09/23	10	0	CI around mean	21.6	200	Standard	No Exceedance
G312	UA	E002	Chromium, total	mg/L	03/30/21 - 08/09/23	10	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G312	UA	E002	Cobalt, total	mg/L	03/30/21 - 08/09/23	10	30	CI around mean	0.00222	0.006	Standard	No Exceedance
G312	UA	E002	Fluoride, total	mg/L	03/30/21 - 08/09/23	10	80	CI around median	0.25	4.0	Standard	No Exceedance
G312	UA	E002	Lead, total	mg/L	03/30/21 - 08/09/23	10	100	All ND - Last	0.001	0.0075	Standard	No Exceedance
G312	UA	E002	Lithium, total	mg/L	03/30/21 - 08/09/23	10	70	CI around median	0.02	0.04	Standard	No Exceedance
G312	UA	E002	Mercury, total	mg/L	03/30/21 - 08/09/23	10	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G312	UA	E002	Molybdenum, total	mg/L	03/30/21 - 08/09/23	10	90	CI around median	0.001	0.1	Standard	No Exceedance
G312	UA	E002	pH (field)	SU	03/30/21 - 08/09/23	10	0	CI around median	6.3/6.5	6.5/9.0	Standard/Standard	No Exceedance
G312	UA	E002	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/09/23	9	0	CI around mean	0.252	5	Standard	No Exceedance
G312	UA	E002	Selenium, total	mg/L	03/30/21 - 08/09/23	10	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G312	UA	E002	Sulfate, total	mg/L	03/30/21 - 08/09/23	10	0	CI around mean	721	400	Standard	Exceedance
G312	UA	E002	Thallium, total	mg/L	03/30/21 - 08/09/23	10	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G312	UA	E002	Total Dissolved Solids	mg/L	03/30/21 - 08/09/23	10	0	CB around linear reg	1,420	1,200	Standard	Exceedance
G313	UA	E002	Antimony, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G313	UA	E002	Arsenic, total	mg/L	03/30/21 - 08/09/23	11	82	CI around median	0.001	0.010	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 3, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G313	UA	E002	Barium, total	mg/L	03/30/21 - 08/09/23	11	0	CB around linear reg	0.014	2.0	Standard	No Exceedance
G313	UA	E002	Beryllium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G313	UA	E002	Boron, total	mg/L	03/30/21 - 08/09/23	11	0	CI around mean	3.29	3.20	Background	Exceedance
G313	UA	E002	Cadmium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G313	UA	E002	Chloride, total	mg/L	03/30/21 - 08/09/23	11	9	CI around median	22	200	Standard	No Exceedance
G313	UA	E002	Chromium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G313	UA	E002	Cobalt, total	mg/L	03/30/21 - 08/09/23	11	82	CI around median	0.002	0.006	Standard	No Exceedance
G313	UA	E002	Fluoride, total	mg/L	03/30/21 - 08/09/23	11	9	CI around mean	0.227	4.0	Standard	No Exceedance
G313	UA	E002	Lead, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.0075	Standard	No Exceedance
G313	UA	E002	Lithium, total	mg/L	03/30/21 - 08/09/23	11	46	CI around median	0.02	0.04	Standard	No Exceedance
G313	UA	E002	Mercury, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G313	UA	E002	Molybdenum, total	mg/L	03/30/21 - 08/09/23	11	18	CI around mean	0.00102	0.1	Standard	No Exceedance
G313	UA	E002	pH (field)	SU	03/30/21 - 08/09/23	11	0	CI around mean	6.8/7.0	6.5/9.0	Standard/Standard	No Exceedance
G313	UA	E002	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/09/23	10	0	CI around mean	0.225	5	Standard	No Exceedance
G313	UA	E002	Selenium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G313	UA	E002	Sulfate, total	mg/L	03/30/21 - 08/09/23	11	0	CB around T-S line	-517	400	Standard	No Exceedance
G313	UA	E002	Thallium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G313	UA	E002	Total Dissolved Solids	mg/L	03/30/21 - 08/09/23	11	0	CI around mean	1,520	1,200	Standard	Exceedance
G314	LCU	E002	Antimony, total	mg/L	03/30/21 - 08/09/23	11	91	CI around median	0.003	0.006	Standard	No Exceedance
G314	LCU	E002	Arsenic, total	mg/L	03/30/21 - 08/09/23	11	73	CI around median	0.001	0.010	Standard	No Exceedance
G314	LCU	E002	Barium, total	mg/L	03/30/21 - 08/09/23	11	0	CI around mean	0.0184	2.0	Standard	No Exceedance
G314	LCU	E002	Beryllium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G314	LCU	E002	Boron, total	mg/L	03/30/21 - 08/09/23	11	0	CI around geomean	0.134	3.20	Background	No Exceedance
G314	LCU	E002	Cadmium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G314	LCU	E002	Chloride, total	mg/L	03/30/21 - 08/09/23	11	0	CI around median	30	200	Standard	No Exceedance
G314	LCU	E002	Chromium, total	mg/L	03/30/21 - 08/09/23	11	91	CI around median	0.004	0.1	Standard	No Exceedance
G314	LCU	E002	Cobalt, total	mg/L	03/30/21 - 08/09/23	11	9	CI around mean	0.00334	0.006	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 3, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G314	LCU	E002	Fluoride, total	mg/L	03/30/21 - 08/09/23	11	91	CI around median	0.25	4.0	Standard	No Exceedance
G314	LCU	E002	Lead, total	mg/L	03/30/21 - 08/09/23	11	82	CI around median	0.001	0.0075	Standard	No Exceedance
G314	LCU	E002	Lithium, total	mg/L	03/30/21 - 08/09/23	11	91	CI around median	0.02	0.04	Standard	No Exceedance
G314	LCU	E002	Mercury, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G314	LCU	E002	Molybdenum, total	mg/L	03/30/21 - 08/09/23	11	0	CB around linear reg	-0.00436	0.1	Standard	No Exceedance
G314	LCU	E002	pH (field)	SU	03/30/21 - 08/09/23	11	0	CI around mean	6.5/6.8	6.5/9.0	Standard/Standard	No Exceedance
G314	LCU	E002	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/09/23	10	0	CI around mean	0.511	5	Standard	No Exceedance
G314	LCU	E002	Selenium, total	mg/L	03/30/21 - 08/09/23	11	82	CI around median	0.001	0.05	Standard	No Exceedance
G314	LCU	E002	Sulfate, total	mg/L	03/30/21 - 08/09/23	11	0	CI around median	2,000	400	Standard	Exceedance
G314	LCU	E002	Thallium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G314	LCU	E002	Total Dissolved Solids	mg/L	03/30/21 - 08/09/23	11	0	CI around median	3,400	1,200	Standard	Exceedance
G314D	DA	E002	Antimony, total	mg/L	03/30/21 - 08/09/23	8	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G314D	DA	E002	Arsenic, total	mg/L	03/30/21 - 08/09/23	8	50	CI around median	0.001	0.010	Standard	No Exceedance
G314D	DA	E002	Barium, total	mg/L	03/30/21 - 08/09/23	8	0	CI around mean	0.0287	2.0	Standard	No Exceedance
G314D	DA	E002	Beryllium, total	mg/L	03/30/21 - 08/09/23	8	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G314D	DA	E002	Boron, total	mg/L	03/30/21 - 08/09/23	8	0	CI around mean	0.144	3.20	Background	No Exceedance
G314D	DA	E002	Cadmium, total	mg/L	03/30/21 - 08/09/23	8	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G314D	DA	E002	Chloride, total	mg/L	03/30/21 - 08/09/23	7	0	CI around mean	45.6	200	Standard	No Exceedance
G314D	DA	E002	Chromium, total	mg/L	03/30/21 - 08/09/23	8	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G314D	DA	E002	Cobalt, total	mg/L	03/30/21 - 08/09/23	8	75	CI around median	0.002	0.006	Standard	No Exceedance
G314D	DA	E002	Fluoride, total	mg/L	03/30/21 - 08/09/23	7	0	CI around mean	0.526	4.0	Standard	No Exceedance
G314D	DA	E002	Lead, total	mg/L	03/30/21 - 08/09/23	8	75	CI around median	0.001	0.0075	Standard	No Exceedance
G314D	DA	E002	Lithium, total	mg/L	03/30/21 - 08/09/23	8	50	CB around linear reg	0.00992	0.04	Standard	No Exceedance
G314D	DA	E002	Mercury, total	mg/L	03/30/21 - 08/09/23	8	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G314D	DA	E002	Molybdenum, total	mg/L	03/30/21 - 08/09/23	8	0	CB around linear reg	-0.00896	0.1	Standard	No Exceedance
G314D	DA	E002	pH (field)	SU	03/30/21 - 08/09/23	8	0	CI around mean	6.9/7.3	6.5/9.0	Standard/Standard	No Exceedance
G314D	DA	E002	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/09/23	8	0	CI around mean	1.5	5	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 3, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G314D	DA	E002	Selenium, total	mg/L	03/30/21 - 08/09/23	8	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G314D	DA	E002	Sulfate, total	mg/L	03/30/21 - 08/09/23	7	0	CI around mean	735	400	Standard	Exceedance
G314D	DA	E002	Thallium, total	mg/L	03/30/21 - 08/09/23	8	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G314D	DA	E002	Total Dissolved Solids	mg/L	03/30/21 - 08/09/23	7	0	CI around mean	1,760	1,200	Standard	Exceedance
G315	UA	E002	Antimony, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G315	UA	E002	Arsenic, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.001	0.010	Standard	No Exceedance
G315	UA	E002	Barium, total	mg/L	03/30/21 - 08/10/23	11	0	CI around mean	0.0204	2.0	Standard	No Exceedance
G315	UA	E002	Beryllium, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G315	UA	E002	Boron, total	mg/L	03/30/21 - 08/10/23	11	0	CI around median	1.2	3.20	Background	No Exceedance
G315	UA	E002	Cadmium, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G315	UA	E002	Chloride, total	mg/L	03/30/21 - 08/10/23	11	0	CI around median	12	200	Standard	No Exceedance
G315	UA	E002	Chromium, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G315	UA	E002	Cobalt, total	mg/L	03/30/21 - 08/10/23	11	91	CI around median	0.002	0.006	Standard	No Exceedance
G315	UA	E002	Fluoride, total	mg/L	03/30/21 - 08/10/23	11	0	CI around mean	0.263	4.0	Standard	No Exceedance
G315	UA	E002	Lead, total	mg/L	03/30/21 - 08/10/23	11	91	CI around median	0.001	0.0075	Standard	No Exceedance
G315	UA	E002	Lithium, total	mg/L	03/30/21 - 08/10/23	11	91	CI around median	0.02	0.04	Standard	No Exceedance
G315	UA	E002	Mercury, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G315	UA	E002	Molybdenum, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G315	UA	E002	pH (field)	SU	03/30/21 - 08/10/23	11	0	CI around mean	6.8/6.9	6.5/9.0	Standard/Standard	No Exceedance
G315	UA	E002	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/10/23	10	0	CI around mean	0.122	5	Standard	No Exceedance
G315	UA	E002	Selenium, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G315	UA	E002	Sulfate, total	mg/L	03/30/21 - 08/10/23	11	0	CB around T-S line	-468	400	Standard	No Exceedance
G315	UA	E002	Thallium, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G315	UA	E002	Total Dissolved Solids	mg/L	03/30/21 - 08/10/23	11	0	CI around mean	1,290	1,200	Standard	Exceedance
G316	LCU	E002	Antimony, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.006	Standard	No Exceedance
G316	LCU	E002	Arsenic, total	mg/L	03/30/21 - 08/09/23	11	0	CI around mean	0.00681	0.010	Standard	No Exceedance
G316	LCU	E002	Barium, total	mg/L	03/30/21 - 08/09/23	11	0	CI around mean	0.0616	2.0	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 3, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
G316	LCU	E002	Beryllium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.004	Standard	No Exceedance
G316	LCU	E002	Boron, total	mg/L	03/30/21 - 08/09/23	11	0	CI around mean	0.363	3.20	Background	No Exceedance
G316	LCU	E002	Cadmium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.005	Standard	No Exceedance
G316	LCU	E002	Chloride, total	mg/L	03/30/21 - 08/09/23	11	0	CI around median	23	200	Standard	No Exceedance
G316	LCU	E002	Chromium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.0015	0.1	Standard	No Exceedance
G316	LCU	E002	Cobalt, total	mg/L	03/30/21 - 08/09/23	11	0	CB around linear reg	0.00218	0.006	Standard	No Exceedance
G316	LCU	E002	Fluoride, total	mg/L	03/30/21 - 08/09/23	11	54	CI around median	0.25	4.0	Standard	No Exceedance
G316	LCU	E002	Lead, total	mg/L	03/30/21 - 08/09/23	11	91	CI around median	0.001	0.0075	Standard	No Exceedance
G316	LCU	E002	Lithium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.003	0.04	Standard	No Exceedance
G316	LCU	E002	Mercury, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
G316	LCU	E002	Molybdenum, total	mg/L	03/30/21 - 08/09/23	11	0	CI around mean	0.00368	0.1	Standard	No Exceedance
G316	LCU	E002	pH (field)	SU	03/30/21 - 08/09/23	11	0	CI around mean	6.9/7.1	6.5/9.0	Standard/Standard	No Exceedance
G316	LCU	E002	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/09/23	10	0	CI around geomean	0.26	5	Standard	No Exceedance
G316	LCU	E002	Selenium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.05	Standard	No Exceedance
G316	LCU	E002	Sulfate, total	mg/L	03/30/21 - 08/09/23	11	0	CI around median	660	400	Standard	Exceedance
G316	LCU	E002	Thallium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.002	0.002	Standard	No Exceedance
G316	LCU	E002	Total Dissolved Solids	mg/L	03/30/21 - 08/09/23	11	0	CI around median	1,600	1,200	Standard	Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 3, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Notes:
Compliance Result:

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

Exceedance: The statistical result exceeded the GWPS.

HSU = hydrostratigraphic unit:

DA = Deep Aquifer

LCU = Lower Confining Unit

UA = Uppermost Aquifer

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

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

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

CB around linear reg = Confidence band around linear regression

CI around geomean = Confidence interval around the geometric mean

CI around mean = Confidence interval around the mean

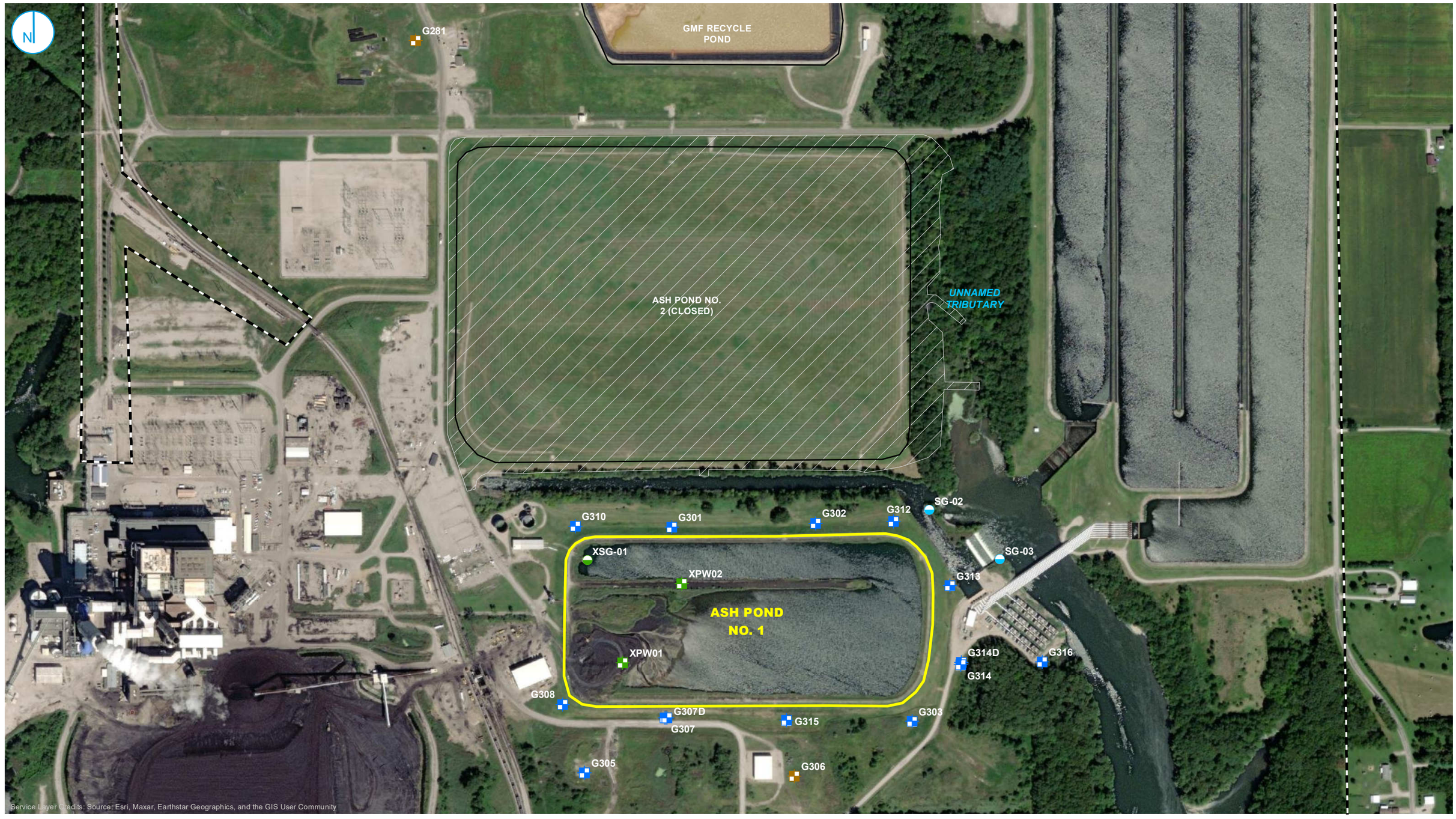
CI around median = Confidence interval around the median

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)

FIGURES



COMPLIANCE MONITORING WELL
BACKGROUND MONITORING WELL
PORE WATER WELL
STAFF GAGE, CCR UNIT
STAFF GAGE, RIVER

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

0 200 400 Feet

MONITORING WELL LOCATION MAP

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT ASH POND NO.1

COFFEEN POWER PLANT
COFFEEN, ILLINOIS

FIGURE 1

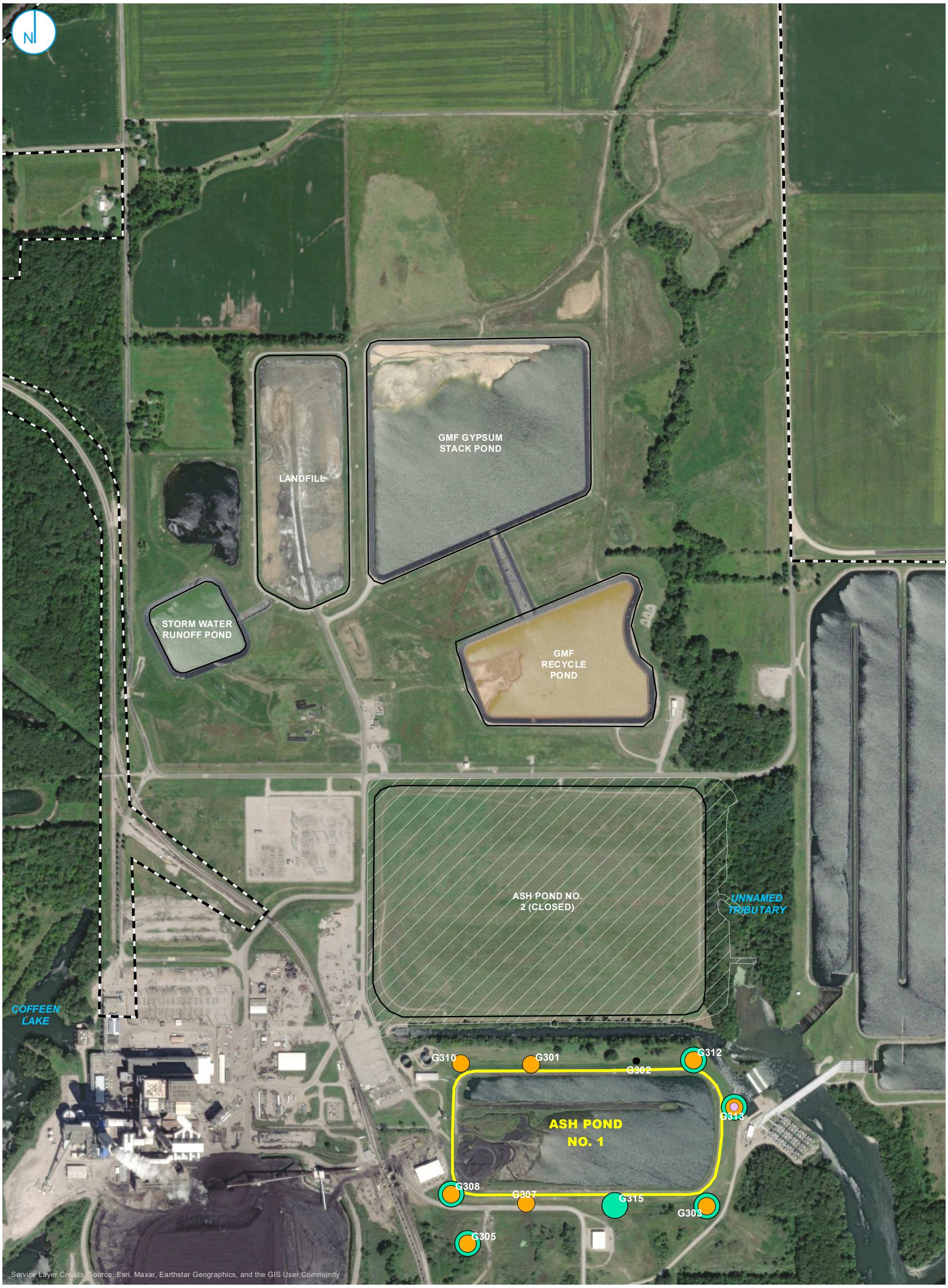
RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

PROJECT: 169000XXXX | DATED: 1/11/2023 | DESIGNER: galammc
Y:\Mapping\Projects\22\12285\MXD\GMP\Coffeen\AP1_101\Figure 2-1 Expanded Part 257 GW Monitoring Well Network.mxd

PROJECT: 169000XXXX | DATED: 1/16/2024 | DESIGNER: GALARNMC

Y:\Mapping\Projects\22\2285\MXD\845_AnnualGWM\2023\COF\101\Figure 2. COF 101 GWPS UA.mxd



TOTAL BORON EXCEEDANCE

TOTAL SULFATE EXCEEDANCE

TOTAL DISSOLVED SOLIDS EXCEEDANCE

COMPLIANCE WELL WITHOUT EXCEEDANCE

REGULATED UNIT (SUBJECT UNIT)

SITE FEATURE

LIMITS OF FINAL COVER

PROPERTY BOUNDARY

0 275 550 Feet

GWPS EXCEEDANCE MAP UPPERMOST AQUIFER QUARTERS 2-3, 2023

FIGURE 2

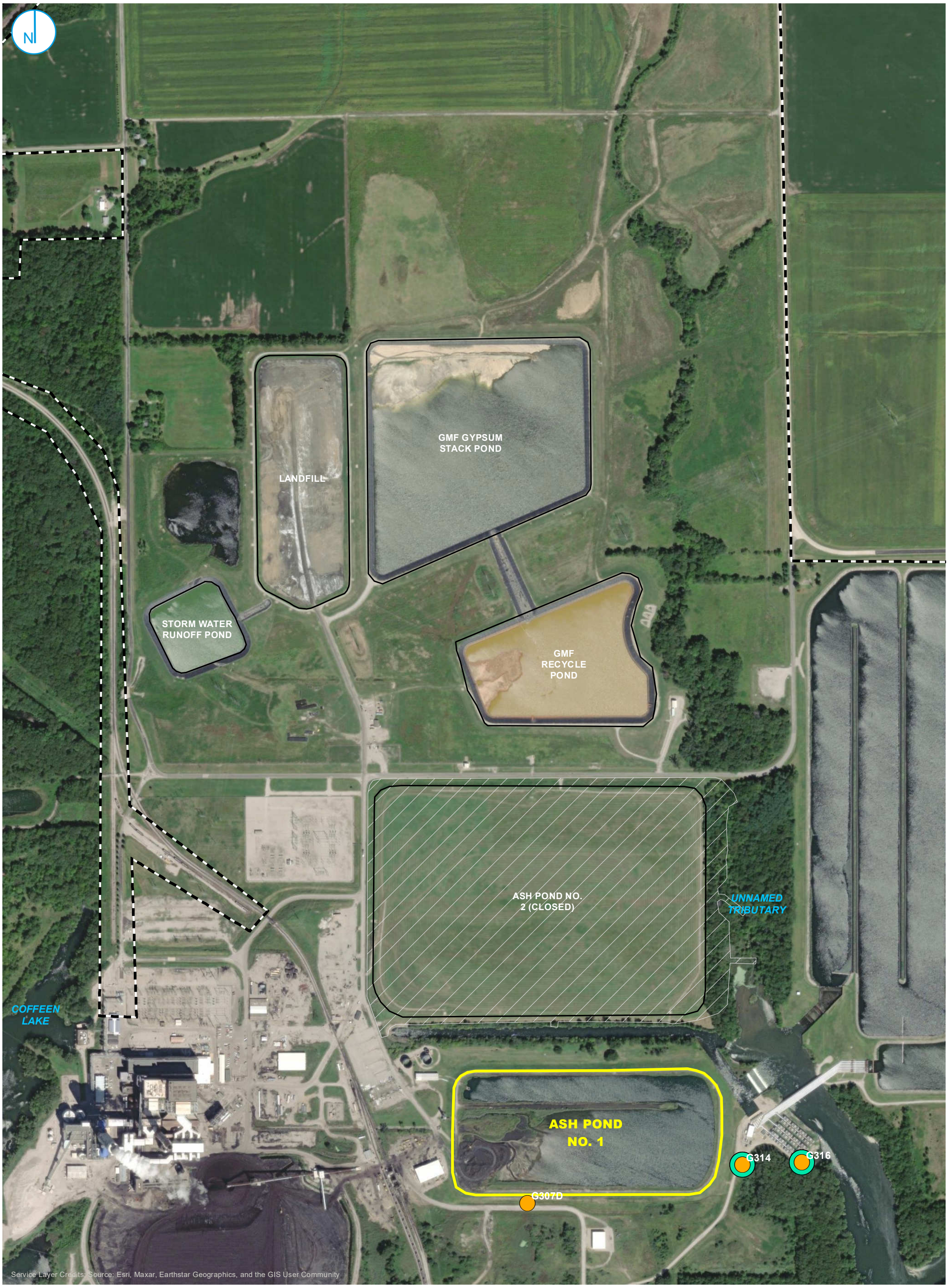
2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
ASH POND NO. 1
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL

PROJECT: 169000XXXX | DATED: 1/16/2024 | DESIGNER: GALARNMC

Y:\Mapping\Projects\22\2285\MXD\845_AnnualGWM\2023\COF\101\Figure 3. COF 101 GWPS LCU.mxd



TOTAL SULFATE EXCEEDANCE

TOTAL DISSOLVED SOLIDS

REGULATED UNIT (SUBJECT UNIT)

SITE FEATURE

LIMITS OF FINAL COVER

PROPERTY BOUNDARY

0 275 550 Feet

GWPS EXCEEDANCE MAP
LOWER CONFINING UNIT
QUARTERS 2-3, 2023

FIGURE 3

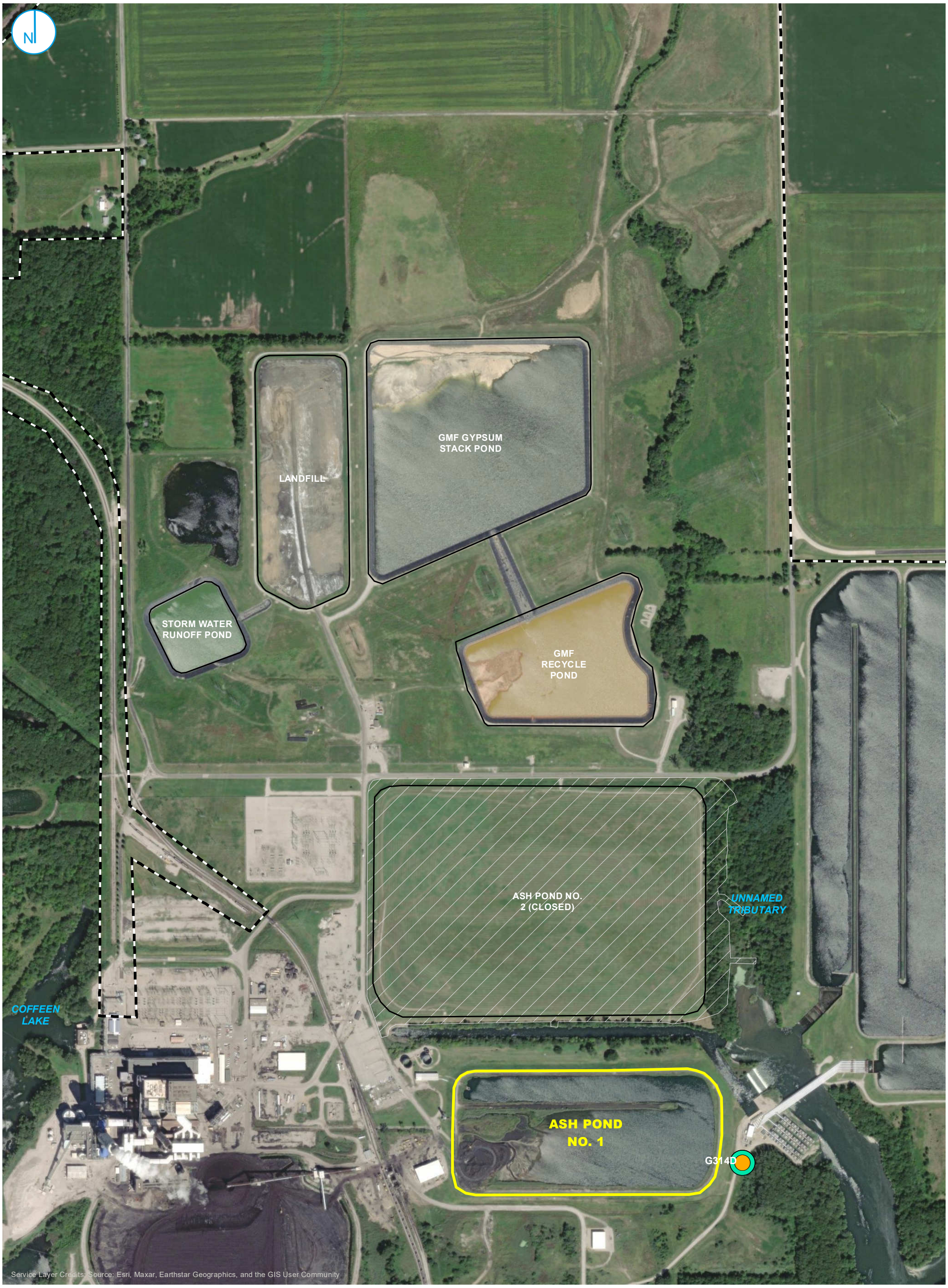
2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
ASH POND NO. 1
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

PROJECT: 169000XXXX | DATED: 1/16/2024 | DESIGNER: GALARNMC

Y:\Mapping\Projects\22\2285\MXD\845_AnnualGWM\2023\COF\101\Figure 4. COF 101 GWPS DA.mxd



TOTAL SULFATE EXCEEDANCE

TOTAL DISSOLVED SOLIDS EXCEEDANCE

REGULATED UNIT (SUBJECT UNIT)

SITE FEATURE

LIMITS OF FINAL COVER

PROPERTY BOUNDARY

0 275 550 Feet

GWPS EXCEEDANCE MAP
DEEP AQUIFER
QUARTERS 2-3, 2023

FIGURE 4

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
ASH POND NO. 1
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

PROJECT: 169000XXXX | DATED: 12/6/2023 | DESIGNER: egreaves

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- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- MONITORING WELL
- SOURCE SAMPLE LOCATION
- LEACHATE WELL
- STAFF GAGE, CCR UNIT
- STAFF GAGE, RIVER
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- LIMITS OF FINAL COVER
- PROPERTY BOUNDARY

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)

POTENTIOMETRIC SURFACE MAP APRIL 30, 2023

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT ASH POND NO. 1

COFFEEN POWER PLANT
COFFEEN, ILLINOIS

FIGURE 5

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL

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

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

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)

POTENTIOMETRIC SURFACE MAP
MAY 30, 2023

FIGURE 6

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
ASH POND NO. 1
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- LEACHATE WELL
- MONITORING WELL
- STAFF GAGE, CCR UNIT
- STAFF GAGE, RIVER
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- LIMITS OF FINAL COVER
- PROPERTY BOUNDARY

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)

POTENTIOMETRIC SURFACE MAP JUNE 8, 2023

FIGURE 7

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
ASH POND NO. 1
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL

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

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

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)

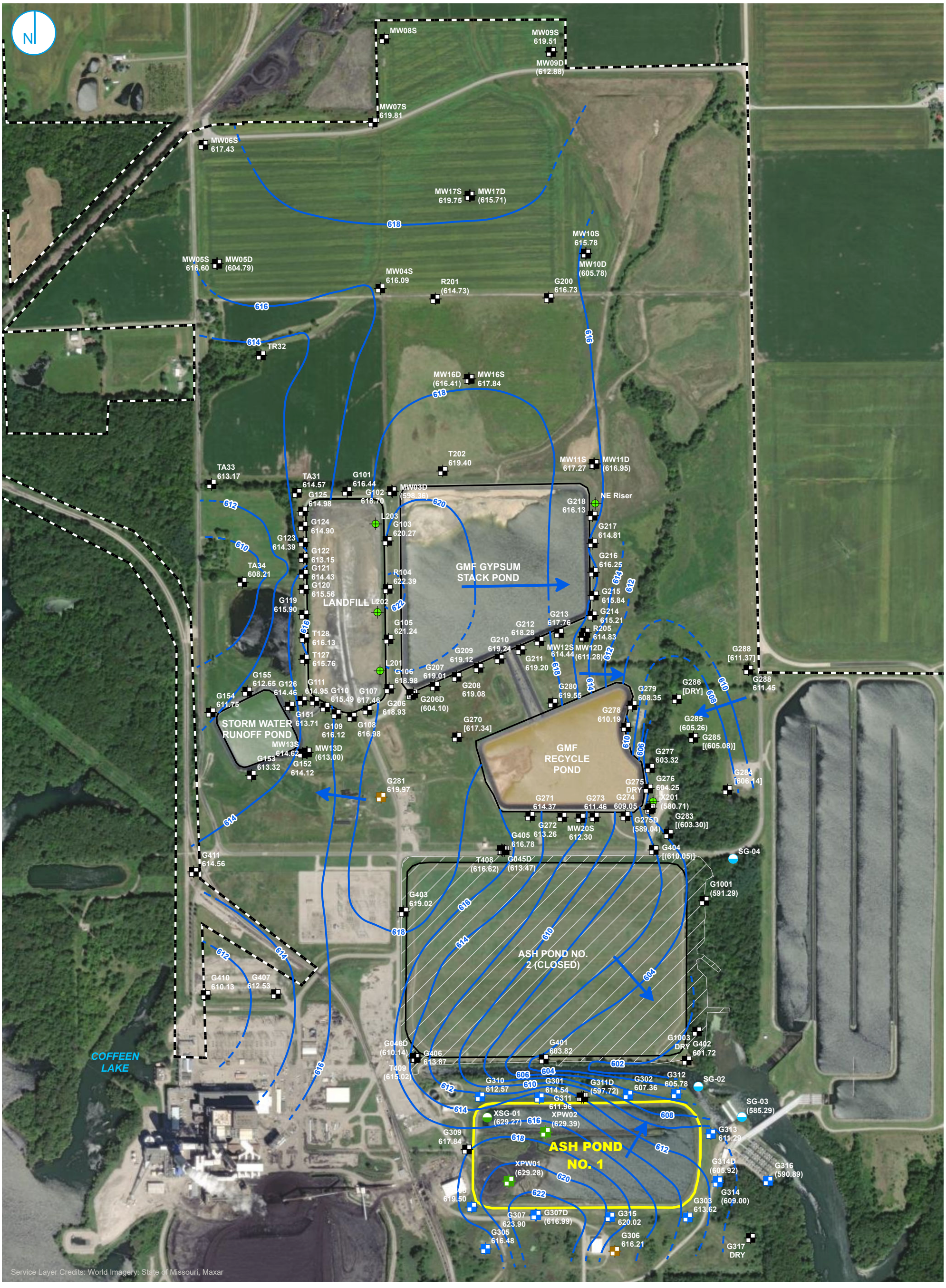
POTENTIOMETRIC SURFACE MAP JULY 8, 2023

FIGURE 8

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
ASH POND NO. 1
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL



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

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

0 325 650 Feet

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

POTENTIOMETRIC SURFACE MAP AUGUST 8, 2023

FIGURE 9

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
ASH POND NO. 1
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL

- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- LEACHATE WELL
- MONITORING WELL
- STAFF GAGE, CCR UNIT
- STAFF GAGE, RIVER
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- LIMITS OF FINAL COVER
- PROPERTY BOUNDARY

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)

POTENTIOMETRIC SURFACE MAP SEPTEMBER 25, 2023

FIGURE 10

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
ASH POND NO. 1
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL

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

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

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)

POTENTIOMETRIC SURFACE MAP OCTOBER 24 AND 25, 2023

FIGURE 11

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
ASH POND NO. 1
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL

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

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

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)

POTENTIOMETRIC SURFACE MAP NOVEMBER 13, 2023

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
ASH POND NO. 1
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

FIGURE 12

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL

PROJECT: 169000XXXX | DATED: 1/25/2024 | DESIGNER: egreaves

Y:\Mapping\Projects\22\2285\MXD\GW_Contours\Round_2023\Coffeen\AP1_101\2023_AP_101.aprx

- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- LEACHATE WELL
- MONITORING WELL
- STAFF GAGE, CCR UNIT
- STAFF GAGE, RIVER
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- LIMITS OF FINAL COVER
- PROPERTY BOUNDARY

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)

POTENTIOMETRIC SURFACE MAP DECEMBER 18, 2023

FIGURE 13

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
ASH POND NO. 1
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL

ATTACHMENTS

ATTACHMENT A
GROUNDWATER ELEVATION DATA

ATTACHMENT A
GROUNDWATER ELEVATION DATA
2023 35 I.A.C. § 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G281	Background	UA	04/30/2023	6.44	619.91
G281	Background	UA	05/30/2023	6.64	619.71
G281	Background	UA	08/08/2023	6.39	619.97
G281	Background	UA	10/24/2023	8.64	617.72
G281	Background	UA	11/13/2023	8.59	617.77
G281	Background	UA	12/18/2023	6.83	619.53
G301	Compliance	UA	06/08/2023	7.70	614.94
G301	Compliance	UA	07/08/2023	7.82	614.82
G301	Compliance	UA	08/08/2023	8.11	614.54
G301	Compliance	UA	10/24/2023	8.51	614.14
G301	Compliance	UA	11/13/2023	8.43	614.22
G301	Compliance	UA	12/18/2023	8.00	614.65
G302	Compliance	UA	04/30/2023	9.10	610.93
G302	Compliance	UA	05/30/2023	11.04	608.99
G302	Compliance	UA	06/08/2023	11.57	608.46
G302	Compliance	UA	07/08/2023	12.07	607.96
G302	Compliance	UA	08/08/2023	12.68	607.36
G302	Compliance	UA	09/25/2023	13.12	606.92
G302	Compliance	UA	11/13/2023	13.16	606.88
G302	Compliance	UA	12/18/2023	12.47	607.57
G303	Compliance	UA	04/30/2023	4.62	617.39
G303	Compliance	UA	05/30/2023	5.92	616.09
G303	Compliance	UA	08/08/2023	8.40	613.62
G303	Compliance	UA	09/25/2023	9.18	612.83
G303	Compliance	UA	10/24/2023	9.71	612.31
G303	Compliance	UA	11/13/2023	9.32	612.70
G303	Compliance	UA	12/18/2023	8.22	613.80
G305	Compliance	UA	04/30/2023	6.59	619.07
G305	Compliance	UA	05/30/2023	7.63	618.03
G305	Compliance	UA	06/08/2023	8.35	617.31
G305	Compliance	UA	07/08/2023	8.23	617.43
G305	Compliance	UA	08/08/2023	9.19	616.48
G305	Compliance	UA	10/24/2023	9.95	615.72
G305	Compliance	UA	11/13/2023	8.50	617.17
G305	Compliance	UA	12/18/2023	8.24	617.43
G306	Background	UA	04/30/2023	6.64	619.26
G306	Background	UA	05/30/2023	8.13	617.77
G306	Background	UA	06/08/2023	9.18	616.72
G306	Background	UA	07/08/2023	8.60	617.30
G306	Background	UA	08/08/2023	9.70	616.21
G306	Background	UA	10/24/2023	10.81	615.10
G306	Background	UA	11/13/2023	10.13	615.78
G306	Background	UA	12/18/2023	7.56	618.35
G307	Compliance	UA	08/08/2023	0.70	623.90
G307	Compliance	UA	11/13/2023	1.96	622.64
G307D	Compliance	LCU	04/30/2023	2.41	622.46

ATTACHMENT A
GROUNDWATER ELEVATION DATA
2023 35 I.A.C. § 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G307D	Compliance	LCU	05/30/2023	2.48	622.39
G307D	Compliance	LCU	08/08/2023	7.89	616.99
G307D	Compliance	LCU	10/24/2023	11.33	613.55
G307D	Compliance	LCU	11/13/2023	12.36	612.52
G307D	Compliance	LCU	12/18/2023	7.55	617.33
G308	Compliance	UA	04/30/2023	4.84	619.74
G308	Compliance	UA	05/30/2023	5.56	619.02
G308	Compliance	UA	06/08/2023	5.93	618.66
G308	Compliance	UA	07/08/2023	5.37	619.22
G308	Compliance	UA	08/08/2023	5.09	619.50
G308	Compliance	UA	09/25/2023	6.16	618.42
G308	Compliance	UA	10/24/2023	6.19	618.40
G308	Compliance	UA	11/13/2023	6.00	618.59
G308	Compliance	UA	12/18/2023	4.71	619.88
G310	Compliance	UA	04/30/2023	8.94	613.92
G310	Compliance	UA	05/30/2023	9.57	613.29
G310	Compliance	UA	06/08/2023	9.96	612.90
G310	Compliance	UA	08/08/2023	10.30	612.57
G310	Compliance	UA	09/25/2023	10.73	612.14
G310	Compliance	UA	10/24/2023	10.82	612.05
G310	Compliance	UA	11/13/2023	10.56	612.31
G310	Compliance	UA	12/18/2023	9.95	612.92
G312	Compliance	UA	04/30/2023	10.81	608.96
G312	Compliance	UA	05/30/2023	12.42	607.35
G312	Compliance	UA	06/08/2023	12.87	606.91
G312	Compliance	UA	07/08/2023	13.42	606.36
G312	Compliance	UA	08/08/2023	14.00	605.78
G312	Compliance	UA	10/24/2023	Dry	Dry
G312	Compliance	UA	11/13/2023	Dry	Dry
G312	Compliance	UA	12/18/2023	14.45	605.33
G313	Compliance	UA	08/08/2023	3.01	611.29
G313	Compliance	UA	10/24/2023	3.08	611.22
G313	Compliance	UA	11/13/2023	3.36	610.94
G313	Compliance	UA	12/18/2023	3.48	610.82
G314	Compliance	LCU	04/30/2023	5.53	608.34
G314	Compliance	LCU	05/30/2023	4.81	609.06
G314	Compliance	LCU	06/08/2023	9.43	604.44
G314	Compliance	LCU	07/08/2023	5.67	608.20
G314	Compliance	LCU	08/08/2023	4.88	609.00
G314	Compliance	LCU	09/25/2023	4.96	608.92
G314	Compliance	LCU	10/24/2023	5.30	608.58
G314	Compliance	LCU	11/13/2023	5.67	608.21
G314	Compliance	LCU	12/18/2023	7.39	606.49
G314D	Compliance	DA	04/30/2023	7.48	606.21
G314D	Compliance	DA	05/30/2023	6.69	607.00
G314D	Compliance	DA	06/08/2023	11.80	601.90

ATTACHMENT A
GROUNDWATER ELEVATION DATA
2023 35 I.A.C. § 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
G314D	Compliance	DA	07/08/2023	7.25	606.45
G314D	Compliance	DA	08/08/2023	7.78	605.92
G314D	Compliance	DA	09/25/2023	8.50	605.20
G314D	Compliance	DA	10/24/2023	8.56	605.14
G314D	Compliance	DA	11/13/2023	7.97	605.73
G314D	Compliance	DA	12/18/2023	7.04	606.66
G315	Compliance	UA	08/08/2023	3.50	620.02
G315	Compliance	UA	10/24/2023	4.04	619.48
G315	Compliance	UA	11/13/2023	4.11	619.41
G315	Compliance	UA	12/18/2023	2.55	620.97
G316	Compliance	LCU	05/30/2023	12.28	590.31
G316	Compliance	LCU	08/08/2023	11.70	590.89
G316	Compliance	LCU	10/24/2023	12.54	590.05
G316	Compliance	LCU	11/13/2023	12.46	590.13
XSG-01	Water Level	CCR	05/30/2023	5.45	630.07
XSG-01	Water Level	CCR	08/08/2023	6.25	629.27
XSG-01	Water Level	CCR	10/24/2023	7.02	628.50
XSG-01	Water Level	CCR	11/13/2023	10.38	625.14
XSG-01	Water Level	CCR	12/18/2023	7.04	628.48
SG-02	Water Level	SW	05/30/2023	7.47	598.40
SG-02	Water Level	SW	10/24/2023	7.49	598.38
SG-02	Water Level	SW	11/13/2023	7.36	598.51
SG-02	Water Level	SW	12/18/2023	7.31	598.56
SG-03	Water Level	SW	05/30/2023	9.85	585.09
SG-03	Water Level	SW	08/08/2023	9.65	585.29
SG-03	Water Level	SW	10/24/2023	8.96	585.98
SG-03	Water Level	SW	11/13/2023	9.71	585.23
SG-03	Water Level	SW	12/18/2023	8.92	586.02

Notes:
Due to malfunctioning pressure transducer, data gaps exist in monthly water level elevations prior to the fourth quarter. Monthly depth to water measurements were collected manually in the fourth quarter.
BMP = below measuring point
NAVD88 = North American Vertical Datum of 1988
Monitored Unit Abbreviations:

CCR = coal combustion residuals
DA = deep aquifer
LCU = lower confining unit
SW = surface water
UA = uppermost aquifer

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ATTACHMENT B
CORRECTIVE MEASURES ASSESSMENT EXTENSION REQUEST AND IEPA APPROVAL LETTER

Illinois Power Generating Company
134 CIPS Lane
Coffeen, IL 62017

January 15, 2024

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

Re: Coffeen Ash Pond No. 1 (IEPA ID No. W1350150004-01), Corrective Measures Assessment Schedule Extension Demonstration

Dear Mr. LeCrone:

In accordance with 35 I.A.C. § 845.660(a)(2), Illinois Power Generating Company (IPGC) is submitting a schedule extension demonstration for completing the Corrective Measures Assessment (CMA) for the Ash Pond No. 1 (IEPA ID No.: W1350150004-01) at the Coffeen Power Plant, as enclosed.

Sincerely,

Dianna Tickner

Dianna Tickner, P.E., PMP
Senior Director, Decommissioning & Demolition

Enclosures

INTRODUCTION AND BACKGROUND

Exceedances of the groundwater protection standards (GWPS) listed in Title 35 of the Illinois Administrative Code (35 I.A.C.) § 845.600 have been detected at the Ash Pond Number (No.) 1 (AP1) (Illinois Environmental Protection Agency [IEPA] Identification [ID] No.: W1350150004-01) at the Coffeen Power Plant (CPP). The GWPS exceedances are documented in the Quarter 2, 2023 groundwater monitoring report that was prepared by Ramboll Americas Engineering Solutions, Inc. (Ramboll) and submitted to IEPA on October 16, 2023 [1].

In accordance with 35 I.A.C. § 845.660, Illinois Power Generating Company (IPGC) initiated a Corrective Measures Assessment (CMA) on January 14, 2024, which was within 90 days of the exceedance detection. Upon reviewing site-specific conditions, circumstances, and information gathered to-date, IPGC has determined, in accordance with 35 I.A.C. § 845.660(a)(2), that an additional 60 days will be required to complete the CMA. This extension of the CMA deadline would result in the CMA for the AP1 being submitted to IEPA on or before June 12, 2024.

DEMONSTRATION

As discussed below, there are four site-specific conditions or circumstances at AP1 that justify the need for a 60-day extension of the default CMA deadline.

Circumstance 1: Additional Sampling and Laboratory Analysis
The reliability of monitored natural attenuation (MNA) to attain groundwater protection standards (GWPS) is currently under evaluation for AP1. IPGC is in the process of performing additional groundwater sampling and performing laboratory testing of MNA-relevant parameters. The results of this sampling and analytical testing will be utilized to evaluate the reliability, including the potential for reversibility, of MNA relative to other types of corrective measures.

Circumstance 2: Consideration of CMA Development for Other Coal Combustion Residuals (CCR) Surface Impoundments (SIs) at the CPP
A total of four CCR SIs are present at the CPP. Exceedances of the GWPS were identified at the same time for all four of the SIs [1], [2], [3], [4]. This will require CMAs to be initiated for all four SIs by the same date and submitted to IEPA by the same date. The other SIs at the CPP include:

- Ash Pond No. 2 (AP2), IEPA ID No. W0578010004-02;
- Gypsum Management Facility Gypsum Stack Pond (GMF GSP), IEPA ID No. W1350150004-03; and
- GMF Recycle Pond (GMF RP), IEPA ID No. W0578010004-04.

Additional time will be required to prepare four CMAs simultaneously under the same initiation and submittal schedules. Furthermore, the SIs are in close proximity to each other (*e.g.,* within 300 to 500 feet), resulting in additional time being required to evaluate corrective action alternatives that can be implemented for each SI while avoiding negative impacts to corrective action that may be implemented for the other SIs present at the CPP.

Circumstance 3: Potential Constraints due to Proposed SI Closures
The evaluation of the performance and reliability of corrective measures for AP1 will be complicated by physical challenges and constraints around effectively implementing corrective measures at the site. These challenges, which are related to proposed closures for three SIs at CPP, include, but are not limited to:

- Closure of AP1, in accordance with the closure plan and construction permit application submitted to IEPA on July 28, 2022 [5], will be an ongoing construction project that may affect the implementation of corrective action.
    - Closure will include a consolidate-and-cap approach where CCRs are removed from a 15-acre area inside AP1 and placed into a consolidated 12-acre area.
    - Closure will include moving approximately 450,000 cubic yards of CCR and underlying soils over a period of 1.5 to 2 years and constructing a final cover system [5].
- Closures for AP1, the GMF GSP, and the GMF RP [5], [6], [7] are expected to be completed at the same time, resulting in three closure construction projects occurring simultaneously at the CPP.

These factors will require additional effort to evaluate the physical location and dimensions of any proposed corrective action which limits impacts to the three proposed closure construction projects.

Circumstance 4: Future Solar Development
The ease of implementation and time required to begin and complete corrective action at AP1 may be affected by potential future solar development at the site. IPGC is in the planning stages for potential future development of a solar facility over the future closed-in-place AP1 which could provide renewable, low-carbon energy to Illinois while repurposing AP1 into productive land use. Additional time is required to evaluate potential conflicts between the future solar development that is being considered and potential corrective measures.

REFERENCES

[1] Ramboll Americas Engineering Solutions, Inc., "35 I.A.C. § 845.610(B)(3)(D) Groundwater Monitoring Data and Detected Exceedances, Quarter 2, 2023, Ash Pond No 1, Coffeen Power Plant," October 16, 2023.

[2] Ramboll Americas Engineering Solutions, Inc., "35 I.A.C. § 845.610(B)(3)(D) Groundwater Monitoring Data and Detected Exceedances, Quarter 2, 2023, GMF Gypsum Stack Pond, Coffeen Power Plant," October 16, 2023.

[3] Ramboll Americas Engineering Solutions, Inc., "35 I.A.C. § 845.610(B)(3)(D) Groundwater Monitoring Data and Detected Exceedances, Quarter 2, 2023, GMF Recycle Pond, Coffeen Power Plant," October 16, 2023.

[4] Ramboll Americas Engineering Solutions, Inc., "35 IAC § 845.610(B)(3)(D) Groundwater Monitoring Data and Detected Exceedances, Quarter 2, 2023, Ash Pond No. 2, Coffeen Power Plant," October 16, 2023.

[5] WSP Golder, "Part 845 Construction Permit Application for Ash Pond No. 1, Coffeen Power Plant," July 28, 2022.

[6] WSP Golder, "Part 845 Construction Permit Application for the Gypsum Management Facility Gypsum Stack Pond, Coffeen Power Plant," July 28, 2022.

[7] WSP Golder, "Part 845 Construction Permit Application for the Gypsum Management Facility Recycle Pond, Coffeen Power Plant," July 28, 2022.

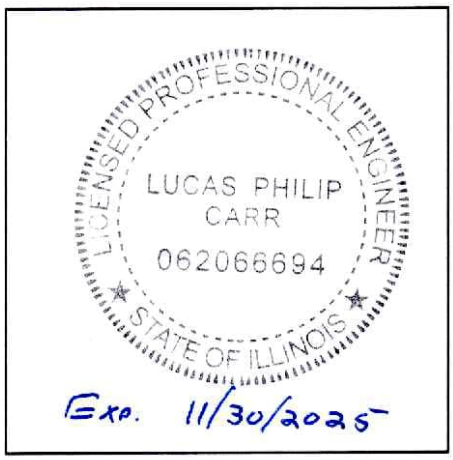
CERTIFICATION STATEMENT

CCR Unit: Illinois Power Generating Company - IPGC; Coffeen Power Plant, Ash Pond No. 1
IEPA ID No.: W1350150004-01

I, Lucas P. Carr, being a Registered Professional Engineer in good standing with the state of Illinois, do herby certify, to the best of my knowledge, information, and belief that the information contained in this certification has been prepared in accordance with the accepted practice of engineering. I certify, for the above referenced CCR unit, that the 60-day extension demonstration for the Corrective Measures Assessment has been prepared in accordance with 35 I.A.C. § 845.600(a)(2) and is accurate.

Lucas P. Carr, P.E.
Senior Managing Consultant

1/15/2024
Date



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217-782-1020

January 17, 2024

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

Re: Coffeen Power Plant Ash Pond No.1, Ash Pond No. 2, GMF Gypsum Stack Pond, and GMF Recycle Pond; W1350150004-01, W1350150004-02, W1350150004-03, W1350150004-04
Corrective Measures Assessment Schedule Extension Request

Dear Mrs. Tickner:

The purpose of this correspondence is to notify you that the Illinois Environmental Protection Agency (Illinois EPA) approves of the extension requests submitted on January 15, 2024, for completing the Corrective Measures Assessment (CMA).

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

Sincerely,

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

Cc: Heather Mullenax
Keegan MacDonna
Phil Morris
Records Files 06M - W1350150004

ATTACHMENT C
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND

- **ATTACHMENT C FROM THE QUARTER 2, 2023 GROUNDWATER MONITORING DATA AND DETECTED EXCEEDANCES REPORT (RAMBOLL, 2023a)**

- **ATTACHMENT C FROM THE QUARTER 3, 2023 GROUNDWATER MONITORING DATA AND DETECTED EXCEEDANCES REPORT (RAMBOLL, 2024a)**

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 2, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G301	UA	E001	Antimony, total	mg/L	11/20/15 - 06/06/23	15	100	All ND - Last	0.003	0.003
G301	UA	E001	Arsenic, total	mg/L	11/20/15 - 06/06/23	20	60	CI around median	0.001	0.00430
G301	UA	E001	Barium, total	mg/L	11/20/15 - 06/06/23	20	0	CB around T-S line	-0.0129	0.120
G301	UA	E001	Beryllium, total	mg/L	11/20/15 - 06/06/23	19	100	All ND - Last	0.001	0.001
G301	UA	E001	Boron, total	mg/L	11/20/15 - 06/06/23	21	0	CI around mean	2.13	3.20
G301	UA	E001	Cadmium, total	mg/L	11/20/15 - 06/06/23	20	95	CI around median	0.001	0.001
G301	UA	E001	Chloride, total	mg/L	11/20/15 - 06/06/23	21	0	CB around linear reg	8.36	120
G301	UA	E001	Chromium, total	mg/L	11/20/15 - 06/06/23	20	60	CI around median	0.004	0.0110
G301	UA	E001	Cobalt, total	mg/L	11/20/15 - 06/06/23	20	35	CI around median	0.002	0.00560
G301	UA	E001	Fluoride, total	mg/L	11/20/15 - 06/06/23	21	38	CI around median	0.25	0.411
G301	UA	E001	Lead, total	mg/L	11/20/15 - 06/06/23	20	45	CI around median	0.001	0.00630
G301	UA	E001	Lithium, total	mg/L	11/20/15 - 06/06/23	20	65	CB around T-S line	0.01	0.0130
G301	UA	E001	Mercury, total	mg/L	11/20/15 - 06/06/23	15	93	CI around median	0.0002	0.00130
G301	UA	E001	Molybdenum, total	mg/L	11/20/15 - 06/06/23	20	100	All ND - Last	0.001	0.00150
G301	UA	E001	pH (field)	SU	11/20/15 - 06/06/23	21	0	CI around mean	6.7/6.9	6.6/7.3
G301	UA	E001	Radium 226 + Radium 228, total	pCi/L	11/20/15 - 06/06/23	20	0	CI around mean	0.527	1.60
G301	UA	E001	Selenium, total	mg/L	11/20/15 - 06/06/23	19	100	All ND - Last	0.001	0.00150
G301	UA	E001	Sulfate, total	mg/L	11/20/15 - 06/06/23	21	0	CI around mean	664	367
G301	UA	E001	Thallium, total	mg/L	11/20/15 - 06/06/23	15	100	All ND - Last	0.001	0.00100
G301	UA	E001	Total Dissolved Solids	mg/L	11/20/15 - 06/06/23	21	0	CI around mean	1,090	1,010
G302	UA	E001	Antimony, total	mg/L	11/20/15 - 05/31/23	15	100	All ND - Last	0.003	0.003
G302	UA	E001	Arsenic, total	mg/L	11/20/15 - 05/31/23	20	25	CI around geomean	0.00123	0.00430
G302	UA	E001	Barium, total	mg/L	11/20/15 - 05/31/23	20	0	CI around geomean	0.0279	0.120
G302	UA	E001	Beryllium, total	mg/L	11/20/15 - 05/31/23	19	100	All ND - Last	0.001	0.001
G302	UA	E001	Boron, total	mg/L	11/20/15 - 05/31/23	21	0	CI around mean	1.59	3.20
G302	UA	E001	Cadmium, total	mg/L	11/20/15 - 05/31/23	20	100	All ND - Last	0.001	0.001
G302	UA	E001	Chloride, total	mg/L	11/20/15 - 05/31/23	21	5	CI around mean	11.3	120

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 2, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G302	UA	E001	Chromium, total	mg/L	11/20/15 - 05/31/23	20	65	CI around median	0.004	0.0110
G302	UA	E001	Cobalt, total	mg/L	11/20/15 - 05/31/23	20	30	CI around median	0.002	0.00560
G302	UA	E001	Fluoride, total	mg/L	11/20/15 - 05/31/23	21	38	CI around median	0.25	0.411
G302	UA	E001	Lead, total	mg/L	11/20/15 - 05/31/23	20	55	CI around median	0.001	0.00630
G302	UA	E001	Lithium, total	mg/L	11/20/15 - 05/31/23	20	35	CI around mean	0.0142	0.0130
G302	UA	E001	Mercury, total	mg/L	11/20/15 - 05/31/23	15	93	CI around median	0.0002	0.00130
G302	UA	E001	Molybdenum, total	mg/L	11/20/15 - 05/31/23	20	45	CI around median	0.001	0.00150
G302	UA	E001	pH (field)	SU	11/20/15 - 05/31/23	21	0	CI around mean	6.8/7.0	6.6/7.3
G302	UA	E001	Radium 226 + Radium 228, total	pCi/L	11/20/15 - 05/31/23	20	0	CI around geomean	0.346	1.60
G302	UA	E001	Selenium, total	mg/L	11/20/15 - 05/31/23	19	95	CI around median	0.001	0.00150
G302	UA	E001	Sulfate, total	mg/L	11/20/15 - 05/31/23	21	0	CI around mean	369	367
G302	UA	E001	Thallium, total	mg/L	11/20/15 - 05/31/23	15	100	All ND - Last	0.001	0.00100
G302	UA	E001	Total Dissolved Solids	mg/L	11/20/15 - 05/31/23	21	0	CI around mean	950	1,010
G303	UA	E001	Antimony, total	mg/L	11/20/15 - 05/31/23	15	100	All ND - Last	0.003	0.003
G303	UA	E001	Arsenic, total	mg/L	11/20/15 - 05/31/23	20	5	CB around linear reg	-0.00372	0.00430
G303	UA	E001	Barium, total	mg/L	11/20/15 - 05/31/23	20	0	CI around median	0.015	0.120
G303	UA	E001	Beryllium, total	mg/L	11/20/15 - 05/31/23	19	100	All ND - Last	0.001	0.001
G303	UA	E001	Boron, total	mg/L	11/20/15 - 05/31/23	21	0	CI around mean	1.72	3.20
G303	UA	E001	Cadmium, total	mg/L	11/20/15 - 05/31/23	20	100	All ND - Last	0.001	0.001
G303	UA	E001	Chloride, total	mg/L	11/20/15 - 05/31/23	21	0	CI around mean	28	120
G303	UA	E001	Chromium, total	mg/L	11/20/15 - 05/31/23	20	90	CI around median	0.004	0.0110
G303	UA	E001	Cobalt, total	mg/L	11/20/15 - 05/31/23	20	35	CI around geomean	0.00238	0.00560
G303	UA	E001	Fluoride, total	mg/L	11/20/15 - 05/31/23	21	24	CI around mean	0.263	0.411
G303	UA	E001	Lead, total	mg/L	11/20/15 - 05/31/23	20	90	CI around median	0.001	0.00630
G303	UA	E001	Lithium, total	mg/L	11/20/15 - 05/31/23	20	0	CB around linear reg	0.00873	0.0130
G303	UA	E001	Mercury, total	mg/L	11/20/15 - 05/31/23	15	87	CI around median	0.0002	0.00130
G303	UA	E001	Molybdenum, total	mg/L	11/20/15 - 05/31/23	20	0	CB around linear reg	0.000967	0.00150

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G303	UA	E001	pH (field)	SU	11/20/15 - 05/31/23	21	0	CI around mean	6.8/7.0	6.6/7.3
G303	UA	E001	Radium 226 + Radium 228, total	pCi/L	11/20/15 - 05/31/23	20	0	CI around mean	0.538	1.60
G303	UA	E001	Selenium, total	mg/L	11/20/15 - 05/31/23	19	100	All ND - Last	0.001	0.00150
G303	UA	E001	Sulfate, total	mg/L	11/20/15 - 05/31/23	21	0	CI around mean	708	367
G303	UA	E001	Thallium, total	mg/L	11/20/15 - 05/31/23	15	100	All ND - Last	0.001	0.00100
G303	UA	E001	Total Dissolved Solids	mg/L	11/20/15 - 05/31/23	21	0	CI around mean	1,510	1,010
G305	UA	E001	Antimony, total	mg/L	05/19/16 - 06/06/23	7	100	All ND - Last	0.003	0.003
G305	UA	E001	Arsenic, total	mg/L	05/19/16 - 06/06/23	7	43	CI around geomean	0.000741	0.00430
G305	UA	E001	Barium, total	mg/L	05/19/16 - 06/06/23	7	0	CI around mean	0.0241	0.120
G305	UA	E001	Beryllium, total	mg/L	05/19/16 - 06/06/23	7	100	All ND - Last	0.001	0.001
G305	UA	E001	Boron, total	mg/L	05/19/16 - 06/06/23	7	0	CI around mean	1.84	3.20
G305	UA	E001	Cadmium, total	mg/L	05/19/16 - 06/06/23	7	100	All ND - Last	0.001	0.001
G305	UA	E001	Chloride, total	mg/L	05/19/16 - 06/06/23	7	0	CI around geomean	19.7	120
G305	UA	E001	Chromium, total	mg/L	05/19/16 - 06/06/23	7	43	CI around mean	0.000287	0.0110
G305	UA	E001	Cobalt, total	mg/L	05/19/16 - 06/06/23	7	57	CI around median	0.002	0.00560
G305	UA	E001	Fluoride, total	mg/L	05/19/16 - 06/06/23	7	0	CI around mean	0.294	0.411
G305	UA	E001	Lead, total	mg/L	05/19/16 - 06/06/23	7	0	CI around geomean	0.0011	0.00630
G305	UA	E001	Lithium, total	mg/L	05/19/16 - 06/06/23	7	57	CI around median	0.01	0.0130
G305	UA	E001	Mercury, total	mg/L	05/19/16 - 06/06/23	7	100	All ND - Last	0.0002	0.00130
G305	UA	E001	Molybdenum, total	mg/L	05/19/16 - 06/06/23	7	43	CI around mean	0.00061	0.00150
G305	UA	E001	pH (field)	SU	05/19/16 - 06/06/23	7	0	CI around mean	7.0/7.4	6.6/7.3
G305	UA	E001	Radium 226 + Radium 228, total	pCi/L	05/19/16 - 06/06/23	7	0	CI around mean	0.428	1.60
G305	UA	E001	Selenium, total	mg/L	05/19/16 - 06/06/23	7	100	All ND - Last	0.001	0.00150
G305	UA	E001	Sulfate, total	mg/L	05/19/16 - 06/06/23	7	0	CI around mean	787	367
G305	UA	E001	Thallium, total	mg/L	05/19/16 - 06/06/23	7	100	All ND - Last	0.001	0.00100
G305	UA	E001	Total Dissolved Solids	mg/L	05/19/16 - 06/06/23	7	0	CI around mean	1,280	1,010
G307	UA	E001	Antimony, total	mg/L	08/16/16 - 06/05/23	12	100	All ND - Last	0.003	0.003

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G307	UA	E001	Arsenic, total	mg/L	08/16/16 - 06/05/23	17	59	CI around median	0.001	0.00430
G307	UA	E001	Barium, total	mg/L	08/16/16 - 06/05/23	17	0	CI around geomean	0.0286	0.120
G307	UA	E001	Beryllium, total	mg/L	08/16/16 - 06/05/23	16	94	CI around median	0.001	0.001
G307	UA	E001	Boron, total	mg/L	08/16/16 - 06/05/23	18	0	CI around mean	1.99	3.20
G307	UA	E001	Cadmium, total	mg/L	08/16/16 - 06/05/23	17	53	CI around median	0.001	0.001
G307	UA	E001	Chloride, total	mg/L	08/16/16 - 06/05/23	18	0	CB around linear reg	8.33	120
G307	UA	E001	Chromium, total	mg/L	08/16/16 - 06/05/23	17	53	CI around median	0.004	0.0110
G307	UA	E001	Cobalt, total	mg/L	08/16/16 - 06/05/23	18	0	CI around median	0.0026	0.00560
G307	UA	E001	Fluoride, total	mg/L	08/16/16 - 06/05/23	18	6	CI around median	0.299	0.411
G307	UA	E001	Lead, total	mg/L	08/16/16 - 06/05/23	17	41	CI around median	0.001	0.00630
G307	UA	E001	Lithium, total	mg/L	08/16/16 - 06/05/23	17	53	CI around median	0.012	0.0130
G307	UA	E001	Mercury, total	mg/L	08/16/16 - 06/05/23	12	92	CI around median	0.0002	0.00130
G307	UA	E001	Molybdenum, total	mg/L	08/16/16 - 06/05/23	17	6	CI around geomean	0.00112	0.00150
G307	UA	E001	pH (field)	SU	08/16/16 - 06/05/23	19	0	CB around linear reg	7.1/7.4	6.6/7.3
G307	UA	E001	Radium 226 + Radium 228, total	pCi/L	08/16/16 - 06/05/23	17	0	CI around mean	0.524	1.60
G307	UA	E001	Selenium, total	mg/L	08/16/16 - 06/05/23	16	81	CI around median	0.001	0.00150
G307	UA	E001	Sulfate, total	mg/L	08/16/16 - 06/05/23	18	0	CB around linear reg	513	367
G307	UA	E001	Thallium, total	mg/L	08/16/16 - 06/05/23	12	100	All ND - Last	0.001	0.00100
G307	UA	E001	Total Dissolved Solids	mg/L	08/16/16 - 06/05/23	18	0	CB around linear reg	1,030	1,010
G307D	LCU	E001	Antimony, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.003	0.003
G307D	LCU	E001	Arsenic, total	mg/L	03/29/21 - 06/05/23	7	29	CI around median	0.001	0.00430
G307D	LCU	E001	Barium, total	mg/L	03/29/21 - 06/05/23	7	0	CI around mean	0.0318	0.120
G307D	LCU	E001	Beryllium, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.001	0.001
G307D	LCU	E001	Boron, total	mg/L	03/29/21 - 06/05/23	7	0	CI around mean	1.25	3.20
G307D	LCU	E001	Cadmium, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.001	0.001
G307D	LCU	E001	Chloride, total	mg/L	03/29/21 - 06/05/23	6	0	CI around mean	14.5	120
G307D	LCU	E001	Chromium, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.004	0.0110

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G307D	LCU	E001	Cobalt, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.002	0.00560
G307D	LCU	E001	Fluoride, total	mg/L	03/29/21 - 06/05/23	6	0	CI around mean	0.464	0.411
G307D	LCU	E001	Lead, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.001	0.00630
G307D	LCU	E001	Lithium, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.02	0.0130
G307D	LCU	E001	Mercury, total	mg/L	03/29/21 - 06/05/23	7	86	CI around median	0.0002	0.00130
G307D	LCU	E001	Molybdenum, total	mg/L	03/29/21 - 06/05/23	7	0	CI around mean	0.00629	0.00150
G307D	LCU	E001	pH (field)	SU	03/29/21 - 06/05/23	7	0	CI around mean	7.2/7.3	6.6/7.3
G307D	LCU	E001	Radium 226 + Radium 228, total	pCi/L	03/29/21 - 06/05/23	8	0	CI around mean	0.113	1.60
G307D	LCU	E001	Selenium, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.001	0.00150
G307D	LCU	E001	Sulfate, total	mg/L	03/29/21 - 06/05/23	6	0	CI around mean	622	367
G307D	LCU	E001	Thallium, total	mg/L	03/29/21 - 06/05/23	7	100	All ND - Last	0.001	0.00100
G307D	LCU	E001	Total Dissolved Solids	mg/L	03/29/21 - 06/05/23	6	0	CI around mean	1,110	1,010
G308	UA	E001	Antimony, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.003	0.003
G308	UA	E001	Arsenic, total	mg/L	03/29/21 - 06/01/23	10	90	CI around median	0.001	0.00430
G308	UA	E001	Barium, total	mg/L	03/29/21 - 06/01/23	10	0	CI around mean	0.0202	0.120
G308	UA	E001	Beryllium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.001
G308	UA	E001	Boron, total	mg/L	03/29/21 - 06/01/23	10	0	CI around mean	2.42	3.20
G308	UA	E001	Cadmium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.001
G308	UA	E001	Chloride, total	mg/L	03/29/21 - 06/01/23	10	10	CI around median	17	120
G308	UA	E001	Chromium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.004	0.0110
G308	UA	E001	Cobalt, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.002	0.00560
G308	UA	E001	Fluoride, total	mg/L	03/29/21 - 06/01/23	10	10	CI around geomean	0.475	0.411
G308	UA	E001	Lead, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.00630
G308	UA	E001	Lithium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.02	0.0130
G308	UA	E001	Mercury, total	mg/L	03/29/21 - 06/01/23	10	90	CI around median	0.0002	0.00130
G308	UA	E001	Molybdenum, total	mg/L	03/29/21 - 06/01/23	10	10	CI around median	0.0012	0.00150
G308	UA	E001	pH (field)	SU	03/29/21 - 06/01/23	10	0	CI around mean	7.2/7.3	6.6/7.3

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G308	UA	E001	Radium 226 + Radium 228, total	pCi/L	03/29/21 - 06/01/23	9	0	CI around mean	0.0429	1.60
G308	UA	E001	Selenium, total	mg/L	03/29/21 - 06/01/23	10	90	CI around median	0.001	0.00150
G308	UA	E001	Sulfate, total	mg/L	03/29/21 - 06/01/23	10	0	CI around mean	1,030	367
G308	UA	E001	Thallium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.00100
G308	UA	E001	Total Dissolved Solids	mg/L	03/29/21 - 06/01/23	10	0	CI around mean	1,810	1,010
G310	UA	E001	Antimony, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.003	0.003
G310	UA	E001	Arsenic, total	mg/L	03/29/21 - 06/01/23	10	90	CI around median	0.001	0.00430
G310	UA	E001	Barium, total	mg/L	03/29/21 - 06/01/23	10	0	CI around mean	0.0148	0.120
G310	UA	E001	Beryllium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.001
G310	UA	E001	Boron, total	mg/L	03/29/21 - 06/01/23	10	0	CI around mean	1.66	3.20
G310	UA	E001	Cadmium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.001
G310	UA	E001	Chloride, total	mg/L	03/29/21 - 06/01/23	10	0	CI around mean	16.7	120
G310	UA	E001	Chromium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.004	0.0110
G310	UA	E001	Cobalt, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.002	0.00560
G310	UA	E001	Fluoride, total	mg/L	03/29/21 - 06/01/23	10	20	CI around mean	0.256	0.411
G310	UA	E001	Lead, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.00630
G310	UA	E001	Lithium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.02	0.0130
G310	UA	E001	Mercury, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.0002	0.00130
G310	UA	E001	Molybdenum, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.00150
G310	UA	E001	pH (field)	SU	03/29/21 - 06/01/23	10	0	CI around mean	7.1/7.2	6.6/7.3
G310	UA	E001	Radium 226 + Radium 228, total	pCi/L	03/29/21 - 06/01/23	9	0	CI around mean	-0.0304	1.60
G310	UA	E001	Selenium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.00150
G310	UA	E001	Sulfate, total	mg/L	03/29/21 - 06/01/23	10	0	CI around geomean	553	367
G310	UA	E001	Thallium, total	mg/L	03/29/21 - 06/01/23	10	100	All ND - Last	0.001	0.00100
G310	UA	E001	Total Dissolved Solids	mg/L	03/29/21 - 06/01/23	10	0	CI around median	1,100	1,010
G312	UA	E001	Antimony, total	mg/L	03/30/21 - 06/01/23	9	100	All ND - Last	0.003	0.003
G312	UA	E001	Arsenic, total	mg/L	03/30/21 - 06/01/23	9	89	CI around median	0.001	0.00430

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G312	UA	E001	Barium, total	mg/L	03/30/21 - 06/01/23	9	0	CI around mean	0.0239	0.120
G312	UA	E001	Beryllium, total	mg/L	03/30/21 - 06/01/23	9	100	All ND - Last	0.001	0.001
G312	UA	E001	Boron, total	mg/L	03/30/21 - 06/01/23	9	0	CI around geomean	1.32	3.20
G312	UA	E001	Cadmium, total	mg/L	03/30/21 - 06/01/23	9	100	All ND - Last	0.001	0.001
G312	UA	E001	Chloride, total	mg/L	03/30/21 - 06/01/23	9	0	CI around mean	21.3	120
G312	UA	E001	Chromium, total	mg/L	03/30/21 - 06/01/23	9	100	All ND - Last	0.004	0.0110
G312	UA	E001	Cobalt, total	mg/L	03/30/21 - 06/01/23	9	33	CI around mean	0.00214	0.00560
G312	UA	E001	Fluoride, total	mg/L	03/30/21 - 06/01/23	9	89	CI around median	0.25	0.411
G312	UA	E001	Lead, total	mg/L	03/30/21 - 06/01/23	9	100	All ND - Last	0.001	0.00630
G312	UA	E001	Lithium, total	mg/L	03/30/21 - 06/01/23	9	78	CI around median	0.02	0.0130
G312	UA	E001	Mercury, total	mg/L	03/30/21 - 06/01/23	9	100	All ND - Last	0.0002	0.00130
G312	UA	E001	Molybdenum, total	mg/L	03/30/21 - 06/01/23	9	89	CI around median	0.001	0.00150
G312	UA	E001	pH (field)	SU	03/30/21 - 06/01/23	9	0	CI around mean	6.4/6.5	6.6/7.3
G312	UA	E001	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 06/01/23	8	0	CB around linear reg	-0.543	1.60
G312	UA	E001	Selenium, total	mg/L	03/30/21 - 06/01/23	9	100	All ND - Last	0.001	0.00150
G312	UA	E001	Sulfate, total	mg/L	03/30/21 - 06/01/23	9	0	CI around mean	696	367
G312	UA	E001	Thallium, total	mg/L	03/30/21 - 06/01/23	9	100	All ND - Last	0.001	0.00100
G312	UA	E001	Total Dissolved Solids	mg/L	03/30/21 - 06/01/23	9	0	CI around mean	1,460	1,010
G313	UA	E001	Antimony, total	mg/L	03/30/21 - 06/06/23	10	100	All ND - Last	0.003	0.003
G313	UA	E001	Arsenic, total	mg/L	03/30/21 - 06/06/23	10	80	CI around median	0.001	0.00430
G313	UA	E001	Barium, total	mg/L	03/30/21 - 06/06/23	10	0	CB around linear reg	0.0125	0.120
G313	UA	E001	Beryllium, total	mg/L	03/30/21 - 06/06/23	10	100	All ND - Last	0.001	0.001
G313	UA	E001	Boron, total	mg/L	03/30/21 - 06/06/23	10	0	CI around mean	3.28	3.20
G313	UA	E001	Cadmium, total	mg/L	03/30/21 - 06/06/23	10	100	All ND - Last	0.001	0.001
G313	UA	E001	Chloride, total	mg/L	03/30/21 - 06/06/23	10	10	CI around median	23	120
G313	UA	E001	Chromium, total	mg/L	03/30/21 - 06/06/23	10	100	All ND - Last	0.004	0.0110
G313	UA	E001	Cobalt, total	mg/L	03/30/21 - 06/06/23	10	80	CI around median	0.002	0.00560

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G313	UA	E001	Fluoride, total	mg/L	03/30/21 - 06/06/23	10	10	CI around mean	0.217	0.411
G313	UA	E001	Lead, total	mg/L	03/30/21 - 06/06/23	10	100	All ND - Last	0.001	0.00630
G313	UA	E001	Lithium, total	mg/L	03/30/21 - 06/06/23	10	50	CI around median	0.02	0.0130
G313	UA	E001	Mercury, total	mg/L	03/30/21 - 06/06/23	10	100	All ND - Last	0.0002	0.00130
G313	UA	E001	Molybdenum, total	mg/L	03/30/21 - 06/06/23	10	10	CI around median	0.0011	0.00150
G313	UA	E001	pH (field)	SU	03/30/21 - 06/06/23	10	0	CI around mean	6.9/7.0	6.6/7.3
G313	UA	E001	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 06/06/23	9	0	CI around mean	0.172	1.60
G313	UA	E001	Selenium, total	mg/L	03/30/21 - 06/06/23	10	100	All ND - Last	0.001	0.00150
G313	UA	E001	Sulfate, total	mg/L	03/30/21 - 06/06/23	10	0	CB around linear reg	491	367
G313	UA	E001	Thallium, total	mg/L	03/30/21 - 06/06/23	10	100	All ND - Last	0.001	0.00100
G313	UA	E001	Total Dissolved Solids	mg/L	03/30/21 - 06/06/23	10	0	CI around median	1,600	1,010
G314	LCU	E001	Antimony, total	mg/L	03/30/21 - 06/01/23	10	100	All ND - Last	0.003	0.003
G314	LCU	E001	Arsenic, total	mg/L	03/30/21 - 06/01/23	10	70	CI around median	0.001	0.00430
G314	LCU	E001	Barium, total	mg/L	03/30/21 - 06/01/23	10	0	CI around mean	0.0185	0.120
G314	LCU	E001	Beryllium, total	mg/L	03/30/21 - 06/01/23	10	100	All ND - Last	0.001	0.001
G314	LCU	E001	Boron, total	mg/L	03/30/21 - 06/01/23	10	0	CI around mean	0.123	3.20
G314	LCU	E001	Cadmium, total	mg/L	03/30/21 - 06/01/23	10	100	All ND - Last	0.001	0.001
G314	LCU	E001	Chloride, total	mg/L	03/30/21 - 06/01/23	10	0	CI around median	30	120
G314	LCU	E001	Chromium, total	mg/L	03/30/21 - 06/01/23	10	90	CI around median	0.004	0.0110
G314	LCU	E001	Cobalt, total	mg/L	03/30/21 - 06/01/23	10	10	CI around mean	0.00285	0.00560
G314	LCU	E001	Fluoride, total	mg/L	03/30/21 - 06/01/23	10	100	All ND - Last	0.25	0.411
G314	LCU	E001	Lead, total	mg/L	03/30/21 - 06/01/23	10	80	CI around median	0.001	0.00630
G314	LCU	E001	Lithium, total	mg/L	03/30/21 - 06/01/23	10	100	All ND - Last	0.02	0.0130
G314	LCU	E001	Mercury, total	mg/L	03/30/21 - 06/01/23	10	100	All ND - Last	0.0002	0.00130
G314	LCU	E001	Molybdenum, total	mg/L	03/30/21 - 06/01/23	10	0	CB around linear reg	-0.00569	0.00150
G314	LCU	E001	pH (field)	SU	03/30/21 - 06/01/23	10	0	CI around mean	6.6/6.9	6.6/7.3
G314	LCU	E001	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 06/01/23	9	0	CI around mean	0.42	1.60

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 2, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G314	LCU	E001	Selenium, total	mg/L	03/30/21 - 06/01/23	10	80	CI around median	0.001	0.00150
G314	LCU	E001	Sulfate, total	mg/L	03/30/21 - 06/01/23	10	0	CI around median	2,000	367
G314	LCU	E001	Thallium, total	mg/L	03/30/21 - 06/01/23	10	100	All ND - Last	0.001	0.00100
G314	LCU	E001	Total Dissolved Solids	mg/L	03/30/21 - 06/01/23	10	0	CI around median	3,400	1,010
G314D	DA	E001	Antimony, total	mg/L	03/30/21 - 06/01/23	7	100	All ND - Last	0.003	0.003
G314D	DA	E001	Arsenic, total	mg/L	03/30/21 - 06/01/23	7	57	CI around median	0.001	0.00430
G314D	DA	E001	Barium, total	mg/L	03/30/21 - 06/01/23	7	0	CI around mean	0.0272	0.120
G314D	DA	E001	Beryllium, total	mg/L	03/30/21 - 06/01/23	7	100	All ND - Last	0.001	0.001
G314D	DA	E001	Boron, total	mg/L	03/30/21 - 06/01/23	7	0	CI around mean	0.138	3.20
G314D	DA	E001	Cadmium, total	mg/L	03/30/21 - 06/01/23	7	100	All ND - Last	0.001	0.001
G314D	DA	E001	Chloride, total	mg/L	03/30/21 - 06/01/23	6	0	CI around mean	42.3	120
G314D	DA	E001	Chromium, total	mg/L	03/30/21 - 06/01/23	7	100	All ND - Last	0.004	0.0110
G314D	DA	E001	Cobalt, total	mg/L	03/30/21 - 06/01/23	7	86	CI around median	0.002	0.00560
G314D	DA	E001	Fluoride, total	mg/L	03/30/21 - 06/01/23	6	0	CI around mean	0.491	0.411
G314D	DA	E001	Lead, total	mg/L	03/30/21 - 06/01/23	7	71	CI around median	0.001	0.00630
G314D	DA	E001	Lithium, total	mg/L	03/30/21 - 06/01/23	7	57	CI around median	0.02	0.0130
G314D	DA	E001	Mercury, total	mg/L	03/30/21 - 06/01/23	7	100	All ND - Last	0.0002	0.00130
G314D	DA	E001	Molybdenum, total	mg/L	03/30/21 - 06/01/23	7	0	CI around mean	0.00344	0.00150
G314D	DA	E001	pH (field)	SU	03/30/21 - 06/01/23	7	0	CI around mean	7.0/7.3	6.6/7.3
G314D	DA	E001	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 06/01/23	7	0	CI around mean	1.5	1.60
G314D	DA	E001	Selenium, total	mg/L	03/30/21 - 06/01/23	7	100	All ND - Last	0.001	0.00150
G314D	DA	E001	Sulfate, total	mg/L	03/30/21 - 06/01/23	6	0	CI around mean	674	367
G314D	DA	E001	Thallium, total	mg/L	03/30/21 - 06/01/23	7	100	All ND - Last	0.001	0.00100
G314D	DA	E001	Total Dissolved Solids	mg/L	03/30/21 - 06/01/23	6	0	CI around mean	1,640	1,010
G315	UA	E001	Antimony, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.003	0.003
G315	UA	E001	Arsenic, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.001	0.00430
G315	UA	E001	Barium, total	mg/L	03/30/21 - 06/07/23	10	0	CI around mean	0.0211	0.120

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 2, 2023
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COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G315	UA	E001	Beryllium, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.001	0.001
G315	UA	E001	Boron, total	mg/L	03/30/21 - 06/07/23	10	0	CI around median	1.2	3.20
G315	UA	E001	Cadmium, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.001	0.001
G315	UA	E001	Chloride, total	mg/L	03/30/21 - 06/07/23	10	0	CI around median	12	120
G315	UA	E001	Chromium, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.004	0.0110
G315	UA	E001	Cobalt, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.002	0.00560
G315	UA	E001	Fluoride, total	mg/L	03/30/21 - 06/07/23	10	0	CI around mean	0.259	0.411
G315	UA	E001	Lead, total	mg/L	03/30/21 - 06/07/23	10	90	CI around median	0.001	0.00630
G315	UA	E001	Lithium, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.02	0.0130
G315	UA	E001	Mercury, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.0002	0.00130
G315	UA	E001	Molybdenum, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.001	0.00150
G315	UA	E001	pH (field)	SU	03/30/21 - 06/07/23	10	0	CI around mean	6.8/6.9	6.6/7.3
G315	UA	E001	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 06/07/23	9	0	CI around mean	0.0593	1.60
G315	UA	E001	Selenium, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.001	0.00150
G315	UA	E001	Sulfate, total	mg/L	03/30/21 - 06/07/23	10	0	CB around T-S line	-718	367
G315	UA	E001	Thallium, total	mg/L	03/30/21 - 06/07/23	10	100	All ND - Last	0.001	0.00100
G315	UA	E001	Total Dissolved Solids	mg/L	03/30/21 - 06/07/23	10	0	CI around mean	1,320	1,010
G316	LCU	E001	Antimony, total	mg/L	03/30/21 - 05/31/23	10	100	All ND - Last	0.003	0.003
G316	LCU	E001	Arsenic, total	mg/L	03/30/21 - 05/31/23	10	0	CI around mean	0.0067	0.00430
G316	LCU	E001	Barium, total	mg/L	03/30/21 - 05/31/23	10	0	CI around mean	0.0614	0.120
G316	LCU	E001	Beryllium, total	mg/L	03/30/21 - 05/31/23	10	100	All ND - Last	0.001	0.001
G316	LCU	E001	Boron, total	mg/L	03/30/21 - 05/31/23	10	0	CI around mean	0.353	3.20
G316	LCU	E001	Cadmium, total	mg/L	03/30/21 - 05/31/23	10	100	All ND - Last	0.001	0.001
G316	LCU	E001	Chloride, total	mg/L	03/30/21 - 05/31/23	10	0	CI around median	23	120
G316	LCU	E001	Chromium, total	mg/L	03/30/21 - 05/31/23	10	100	All ND - Last	0.004	0.0110
G316	LCU	E001	Cobalt, total	mg/L	03/30/21 - 05/31/23	10	0	CB around linear reg	0.00204	0.00560
G316	LCU	E001	Fluoride, total	mg/L	03/30/21 - 05/31/23	10	60	CI around median	0.25	0.411

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 2, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G316	LCU	E001	Lead, total	mg/L	03/30/21 - 05/31/23	10	90	CI around median	0.001	0.00630
G316	LCU	E001	Lithium, total	mg/L	03/30/21 - 05/31/23	10	100	All ND - Last	0.02	0.0130
G316	LCU	E001	Mercury, total	mg/L	03/30/21 - 05/31/23	10	100	All ND - Last	0.0002	0.00130
G316	LCU	E001	Molybdenum, total	mg/L	03/30/21 - 05/31/23	10	0	CI around mean	0.00364	0.00150
G316	LCU	E001	pH (field)	SU	03/30/21 - 05/31/23	10	0	CI around mean	7.0/7.1	6.6/7.3
G316	LCU	E001	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 05/31/23	9	0	CI around geomean	0.225	1.60
G316	LCU	E001	Selenium, total	mg/L	03/30/21 - 05/31/23	10	100	All ND - Last	0.001	0.00150
G316	LCU	E001	Sulfate, total	mg/L	03/30/21 - 05/31/23	10	0	CI around median	660	367
G316	LCU	E001	Thallium, total	mg/L	03/30/21 - 05/31/23	10	100	All ND - Last	0.001	0.00100
G316	LCU	E001	Total Dissolved Solids	mg/L	03/30/21 - 05/31/23	10	0	CI around median	1,600	1,010

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

DA = Deep Aquifer

LCU = Lower Confining Unit

UA = Uppermost Aquifer

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

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

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

CB around linear reg = Confidence band around linear regression

CI around geomean = Confidence interval around the geometric mean

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

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

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 3, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G301	UA	E002	Antimony, total	mg/L	11/20/15 - 08/09/23	16	100	All ND - Last	0.001	0.003
G301	UA	E002	Arsenic, total	mg/L	11/20/15 - 08/09/23	21	62	CI around median	0.001	0.00430
G301	UA	E002	Barium, total	mg/L	11/20/15 - 08/09/23	21	0	CB around T-S line	-0.0101	0.120
G301	UA	E002	Beryllium, total	mg/L	11/20/15 - 08/09/23	20	100	All ND - Last	0.001	0.001
G301	UA	E002	Boron, total	mg/L	11/20/15 - 08/09/23	22	0	CB around linear reg	1.82	3.20
G301	UA	E002	Cadmium, total	mg/L	11/20/15 - 08/09/23	21	95	CI around median	0.001	0.001
G301	UA	E002	Chloride, total	mg/L	11/20/15 - 08/09/23	22	0	CB around linear reg	8.44	120
G301	UA	E002	Chromium, total	mg/L	11/20/15 - 08/09/23	21	62	CI around median	0.004	0.0110
G301	UA	E002	Cobalt, total	mg/L	11/20/15 - 08/09/23	21	33	CB around T-S line	0.000466	0.00560
G301	UA	E002	Fluoride, total	mg/L	11/20/15 - 08/09/23	22	36	CI around geomean	0.264	0.411
G301	UA	E002	Lead, total	mg/L	11/20/15 - 08/09/23	21	48	CI around median	0.001	0.00630
G301	UA	E002	Lithium, total	mg/L	11/20/15 - 08/09/23	21	62	CB around T-S line	0.01	0.0130
G301	UA	E002	Mercury, total	mg/L	11/20/15 - 08/09/23	16	94	CI around median	0.0002	0.00130
G301	UA	E002	Molybdenum, total	mg/L	11/20/15 - 08/09/23	21	100	All ND - Last	0.0015	0.00150
G301	UA	E002	pH (field)	SU	11/20/15 - 08/09/23	22	0	CI around mean	6.7/6.9	6.6/7.3
G301	UA	E002	Radium 226 + Radium 228, total	pCi/L	11/20/15 - 08/09/23	21	0	CI around mean	0.552	1.60
G301	UA	E002	Selenium, total	mg/L	11/20/15 - 08/09/23	20	100	All ND - Last	0.001	0.00150
G301	UA	E002	Sulfate, total	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	652	367
G301	UA	E002	Thallium, total	mg/L	11/20/15 - 08/09/23	16	100	All ND - Last	0.002	0.00100
G301	UA	E002	Total Dissolved Solids	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	1,080	1,010
G302	UA	E002	Antimony, total	mg/L	11/20/15 - 08/09/23	16	100	All ND - Last	0.001	0.003
G302	UA	E002	Arsenic, total	mg/L	11/20/15 - 08/09/23	21	24	CI around geomean	0.00119	0.00430
G302	UA	E002	Barium, total	mg/L	11/20/15 - 08/09/23	21	0	CI around geomean	0.0278	0.120
G302	UA	E002	Beryllium, total	mg/L	11/20/15 - 08/09/23	20	100	All ND - Last	0.001	0.001
G302	UA	E002	Boron, total	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	1.6	3.20
G302	UA	E002	Cadmium, total	mg/L	11/20/15 - 08/09/23	21	100	All ND - Last	0.001	0.001
G302	UA	E002	Chloride, total	mg/L	11/20/15 - 08/09/23	22	4	CI around mean	11.1	120

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 3, 2023
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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G302	UA	E002	Chromium, total	mg/L	11/20/15 - 08/09/23	21	67	CI around median	0.004	0.0110
G302	UA	E002	Cobalt, total	mg/L	11/20/15 - 08/09/23	21	29	CI around median	0.002	0.00560
G302	UA	E002	Fluoride, total	mg/L	11/20/15 - 08/09/23	22	36	CI around median	0.25	0.411
G302	UA	E002	Lead, total	mg/L	11/20/15 - 08/09/23	21	57	CI around median	0.001	0.00630
G302	UA	E002	Lithium, total	mg/L	11/20/15 - 08/09/23	21	33	CI around mean	0.0128	0.0130
G302	UA	E002	Mercury, total	mg/L	11/20/15 - 08/09/23	16	94	CI around median	0.0002	0.00130
G302	UA	E002	Molybdenum, total	mg/L	11/20/15 - 08/09/23	21	48	CI around median	0.001	0.00150
G302	UA	E002	pH (field)	SU	11/20/15 - 08/09/23	22	0	CI around mean	6.8/7.0	6.6/7.3
G302	UA	E002	Radium 226 + Radium 228, total	pCi/L	11/20/15 - 08/09/23	21	0	CI around geomean	0.362	1.60
G302	UA	E002	Selenium, total	mg/L	11/20/15 - 08/09/23	20	95	CI around median	0.001	0.00150
G302	UA	E002	Sulfate, total	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	368	367
G302	UA	E002	Thallium, total	mg/L	11/20/15 - 08/09/23	16	100	All ND - Last	0.002	0.00100
G302	UA	E002	Total Dissolved Solids	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	952	1,010
G303	UA	E002	Antimony, total	mg/L	11/20/15 - 08/09/23	16	100	All ND - Last	0.001	0.003
G303	UA	E002	Arsenic, total	mg/L	11/20/15 - 08/09/23	21	5	CB around linear reg	-0.00318	0.00430
G303	UA	E002	Barium, total	mg/L	11/20/15 - 08/09/23	21	0	CI around median	0.015	0.120
G303	UA	E002	Beryllium, total	mg/L	11/20/15 - 08/09/23	20	100	All ND - Last	0.001	0.001
G303	UA	E002	Boron, total	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	1.73	3.20
G303	UA	E002	Cadmium, total	mg/L	11/20/15 - 08/09/23	21	100	All ND - Last	0.001	0.001
G303	UA	E002	Chloride, total	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	27.9	120
G303	UA	E002	Chromium, total	mg/L	11/20/15 - 08/09/23	21	90	CI around median	0.004	0.0110
G303	UA	E002	Cobalt, total	mg/L	11/20/15 - 08/09/23	21	33	CI around geomean	0.00235	0.00560
G303	UA	E002	Fluoride, total	mg/L	11/20/15 - 08/09/23	22	23	CI around mean	0.263	0.411
G303	UA	E002	Lead, total	mg/L	11/20/15 - 08/09/23	21	86	CI around median	0.001	0.00630
G303	UA	E002	Lithium, total	mg/L	11/20/15 - 08/09/23	21	0	CB around linear reg	0.0117	0.0130
G303	UA	E002	Mercury, total	mg/L	11/20/15 - 08/09/23	16	88	CI around median	0.0002	0.00130
G303	UA	E002	Molybdenum, total	mg/L	11/20/15 - 08/09/23	21	0	CB around linear reg	0.00107	0.00150

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 3, 2023
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COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G303	UA	E002	pH (field)	SU	11/20/15 - 08/09/23	22	0	CI around mean	6.8/7.0	6.6/7.3
G303	UA	E002	Radium 226 + Radium 228, total	pCi/L	11/20/15 - 08/09/23	21	0	CI around mean	0.572	1.60
G303	UA	E002	Selenium, total	mg/L	11/20/15 - 08/09/23	20	100	All ND - Last	0.001	0.00150
G303	UA	E002	Sulfate, total	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	708	367
G303	UA	E002	Thallium, total	mg/L	11/20/15 - 08/09/23	16	100	All ND - Last	0.002	0.00100
G303	UA	E002	Total Dissolved Solids	mg/L	11/20/15 - 08/09/23	22	0	CI around mean	1,510	1,010
G305	UA	E002	Antimony, total	mg/L	05/19/16 - 08/10/23	8	100	All ND - Last	0.001	0.003
G305	UA	E002	Arsenic, total	mg/L	05/19/16 - 08/10/23	8	50	CI around median	0.001	0.00430
G305	UA	E002	Barium, total	mg/L	05/19/16 - 08/10/23	8	0	CI around mean	0.0236	0.120
G305	UA	E002	Beryllium, total	mg/L	05/19/16 - 08/10/23	8	100	All ND - Last	0.001	0.001
G305	UA	E002	Boron, total	mg/L	05/19/16 - 08/10/23	8	0	CI around mean	1.93	3.20
G305	UA	E002	Cadmium, total	mg/L	05/19/16 - 08/10/23	8	100	All ND - Last	0.001	0.001
G305	UA	E002	Chloride, total	mg/L	05/19/16 - 08/10/23	8	0	CI around geomean	19.8	120
G305	UA	E002	Chromium, total	mg/L	05/19/16 - 08/10/23	8	50	CI around mean	-0.00132	0.0110
G305	UA	E002	Cobalt, total	mg/L	05/19/16 - 08/10/23	8	62	CI around median	0.001	0.00560
G305	UA	E002	Fluoride, total	mg/L	05/19/16 - 08/10/23	8	0	CI around mean	0.323	0.411
G305	UA	E002	Lead, total	mg/L	05/19/16 - 08/10/23	8	12	CI around geomean	0.000823	0.00630
G305	UA	E002	Lithium, total	mg/L	05/19/16 - 08/10/23	8	50	CI around mean	0.00667	0.0130
G305	UA	E002	Mercury, total	mg/L	05/19/16 - 08/10/23	8	100	All ND - Last	0.0002	0.00130
G305	UA	E002	Molybdenum, total	mg/L	05/19/16 - 08/10/23	8	38	CI around mean	0.000776	0.00150
G305	UA	E002	pH (field)	SU	05/19/16 - 08/10/23	8	0	CI around mean	7.0/7.4	6.6/7.3
G305	UA	E002	Radium 226 + Radium 228, total	pCi/L	05/19/16 - 08/10/23	8	0	CI around mean	0.443	1.60
G305	UA	E002	Selenium, total	mg/L	05/19/16 - 08/10/23	8	100	All ND - Last	0.001	0.00150
G305	UA	E002	Sulfate, total	mg/L	05/19/16 - 08/10/23	8	0	CI around mean	801	367
G305	UA	E002	Thallium, total	mg/L	05/19/16 - 08/10/23	8	100	All ND - Last	0.002	0.00100
G305	UA	E002	Total Dissolved Solids	mg/L	05/19/16 - 08/10/23	8	0	CI around mean	1,320	1,010
G307D	LCU	E002	Antimony, total	mg/L	03/29/21 - 08/10/23	8	100	All ND - Last	0.001	0.003

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G307D	LCU	E002	Arsenic, total	mg/L	03/29/21 - 08/10/23	8	25	CI around geomean	0.000772	0.00430
G307D	LCU	E002	Barium, total	mg/L	03/29/21 - 08/10/23	8	0	CB around linear reg	0.0154	0.120
G307D	LCU	E002	Beryllium, total	mg/L	03/29/21 - 08/10/23	8	100	All ND - Last	0.001	0.001
G307D	LCU	E002	Boron, total	mg/L	03/29/21 - 08/10/23	8	0	CI around geomean	1.2	3.20
G307D	LCU	E002	Cadmium, total	mg/L	03/29/21 - 08/10/23	8	100	All ND - Last	0.001	0.001
G307D	LCU	E002	Chloride, total	mg/L	03/29/21 - 08/10/23	7	0	CI around mean	13.8	120
G307D	LCU	E002	Chromium, total	mg/L	03/29/21 - 08/10/23	8	100	All ND - Last	0.0015	0.0110
G307D	LCU	E002	Cobalt, total	mg/L	03/29/21 - 08/10/23	8	100	All ND - Last	0.001	0.00560
G307D	LCU	E002	Fluoride, total	mg/L	03/29/21 - 08/10/23	7	0	CI around mean	0.492	0.411
G307D	LCU	E002	Lead, total	mg/L	03/29/21 - 08/10/23	8	100	All ND - Last	0.001	0.00630
G307D	LCU	E002	Lithium, total	mg/L	03/29/21 - 08/10/23	8	88	CI around median	0.0032	0.0130
G307D	LCU	E002	Mercury, total	mg/L	03/29/21 - 08/10/23	8	88	CI around median	0.0002	0.00130
G307D	LCU	E002	Molybdenum, total	mg/L	03/29/21 - 08/10/23	8	0	CI around mean	0.00589	0.00150
G307D	LCU	E002	pH (field)	SU	03/29/21 - 08/10/23	8	0	CI around mean	7.2/7.3	6.6/7.3
G307D	LCU	E002	Radium 226 + Radium 228, total	pCi/L	03/29/21 - 08/10/23	9	0	CI around mean	0.176	1.60
G307D	LCU	E002	Selenium, total	mg/L	03/29/21 - 08/10/23	8	100	All ND - Last	0.001	0.00150
G307D	LCU	E002	Sulfate, total	mg/L	03/29/21 - 08/10/23	7	0	CI around mean	602	367
G307D	LCU	E002	Thallium, total	mg/L	03/29/21 - 08/10/23	8	100	All ND - Last	0.002	0.00100
G307D	LCU	E002	Total Dissolved Solids	mg/L	03/29/21 - 08/10/23	7	0	CI around mean	1,090	1,010
G308	UA	E002	Antimony, total	mg/L	03/29/21 - 08/10/23	11	100	All ND - Last	0.001	0.003
G308	UA	E002	Arsenic, total	mg/L	03/29/21 - 08/10/23	11	91	CI around median	0.001	0.00430
G308	UA	E002	Barium, total	mg/L	03/29/21 - 08/10/23	11	0	CI around mean	0.0204	0.120
G308	UA	E002	Beryllium, total	mg/L	03/29/21 - 08/10/23	11	100	All ND - Last	0.001	0.001
G308	UA	E002	Boron, total	mg/L	03/29/21 - 08/10/23	11	0	CI around mean	2.44	3.20
G308	UA	E002	Cadmium, total	mg/L	03/29/21 - 08/10/23	11	100	All ND - Last	0.001	0.001
G308	UA	E002	Chloride, total	mg/L	03/29/21 - 08/10/23	11	9	CI around median	14	120
G308	UA	E002	Chromium, total	mg/L	03/29/21 - 08/10/23	11	100	All ND - Last	0.0015	0.0110

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G308	UA	E002	Cobalt, total	mg/L	03/29/21 - 08/10/23	11	100	All ND - Last	0.001	0.00560
G308	UA	E002	Fluoride, total	mg/L	03/29/21 - 08/10/23	11	9	CI around geomean	0.491	0.411
G308	UA	E002	Lead, total	mg/L	03/29/21 - 08/10/23	11	100	All ND - Last	0.001	0.00630
G308	UA	E002	Lithium, total	mg/L	03/29/21 - 08/10/23	11	91	CI around median	0.02	0.0130
G308	UA	E002	Mercury, total	mg/L	03/29/21 - 08/10/23	11	91	CI around median	0.0002	0.00130
G308	UA	E002	Molybdenum, total	mg/L	03/29/21 - 08/10/23	11	9	CI around median	0.0012	0.00150
G308	UA	E002	pH (field)	SU	03/29/21 - 08/10/23	11	0	CI around mean	7.2/7.3	6.6/7.3
G308	UA	E002	Radium 226 + Radium 228, total	pCi/L	03/29/21 - 08/10/23	10	0	CI around mean	0.0822	1.60
G308	UA	E002	Selenium, total	mg/L	03/29/21 - 08/10/23	11	91	CI around median	0.001	0.00150
G308	UA	E002	Sulfate, total	mg/L	03/29/21 - 08/10/23	11	0	CI around mean	1,020	367
G308	UA	E002	Thallium, total	mg/L	03/29/21 - 08/10/23	11	100	All ND - Last	0.002	0.00100
G308	UA	E002	Total Dissolved Solids	mg/L	03/29/21 - 08/10/23	11	0	CI around mean	1,800	1,010
G310	UA	E002	Antimony, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.001	0.003
G310	UA	E002	Arsenic, total	mg/L	03/29/21 - 08/09/23	11	91	CI around median	0.001	0.00430
G310	UA	E002	Barium, total	mg/L	03/29/21 - 08/09/23	11	0	CI around mean	0.0148	0.120
G310	UA	E002	Beryllium, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.001	0.001
G310	UA	E002	Boron, total	mg/L	03/29/21 - 08/09/23	11	0	CI around mean	1.68	3.20
G310	UA	E002	Cadmium, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.001	0.001
G310	UA	E002	Chloride, total	mg/L	03/29/21 - 08/09/23	11	0	CI around mean	16.1	120
G310	UA	E002	Chromium, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.0015	0.0110
G310	UA	E002	Cobalt, total	mg/L	03/29/21 - 08/09/23	11	91	CI around median	0.002	0.00560
G310	UA	E002	Fluoride, total	mg/L	03/29/21 - 08/09/23	11	18	CI around mean	0.262	0.411
G310	UA	E002	Lead, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.001	0.00630
G310	UA	E002	Lithium, total	mg/L	03/29/21 - 08/09/23	11	91	CI around median	0.02	0.0130
G310	UA	E002	Mercury, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.0002	0.00130
G310	UA	E002	Molybdenum, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.0015	0.00150
G310	UA	E002	pH (field)	SU	03/29/21 - 08/09/23	11	0	CI around median	7.0/7.2	6.6/7.3

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G310	UA	E002	Radium 226 + Radium 228, total	pCi/L	03/29/21 - 08/09/23	10	0	CI around mean	0.0482	1.60
G310	UA	E002	Selenium, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.001	0.00150
G310	UA	E002	Sulfate, total	mg/L	03/29/21 - 08/09/23	11	0	CB around T-S line	-6,390	367
G310	UA	E002	Thallium, total	mg/L	03/29/21 - 08/09/23	11	100	All ND - Last	0.002	0.00100
G310	UA	E002	Total Dissolved Solids	mg/L	03/29/21 - 08/09/23	11	0	CI around median	1,100	1,010
G312	UA	E002	Antimony, total	mg/L	03/30/21 - 08/09/23	10	100	All ND - Last	0.001	0.003
G312	UA	E002	Arsenic, total	mg/L	03/30/21 - 08/09/23	10	90	CI around median	0.001	0.00430
G312	UA	E002	Barium, total	mg/L	03/30/21 - 08/09/23	10	0	CI around mean	0.0243	0.120
G312	UA	E002	Beryllium, total	mg/L	03/30/21 - 08/09/23	10	100	All ND - Last	0.001	0.001
G312	UA	E002	Boron, total	mg/L	03/30/21 - 08/09/23	10	0	CI around geomean	1.38	3.20
G312	UA	E002	Cadmium, total	mg/L	03/30/21 - 08/09/23	10	100	All ND - Last	0.001	0.001
G312	UA	E002	Chloride, total	mg/L	03/30/21 - 08/09/23	10	0	CI around mean	21.6	120
G312	UA	E002	Chromium, total	mg/L	03/30/21 - 08/09/23	10	100	All ND - Last	0.0015	0.0110
G312	UA	E002	Cobalt, total	mg/L	03/30/21 - 08/09/23	10	30	CI around mean	0.00222	0.00560
G312	UA	E002	Fluoride, total	mg/L	03/30/21 - 08/09/23	10	80	CI around median	0.25	0.411
G312	UA	E002	Lead, total	mg/L	03/30/21 - 08/09/23	10	100	All ND - Last	0.001	0.00630
G312	UA	E002	Lithium, total	mg/L	03/30/21 - 08/09/23	10	70	CI around median	0.02	0.0130
G312	UA	E002	Mercury, total	mg/L	03/30/21 - 08/09/23	10	100	All ND - Last	0.0002	0.00130
G312	UA	E002	Molybdenum, total	mg/L	03/30/21 - 08/09/23	10	90	CI around median	0.001	0.00150
G312	UA	E002	pH (field)	SU	03/30/21 - 08/09/23	10	0	CI around median	6.3/6.5	6.6/7.3
G312	UA	E002	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/09/23	9	0	CI around mean	0.252	1.60
G312	UA	E002	Selenium, total	mg/L	03/30/21 - 08/09/23	10	100	All ND - Last	0.001	0.00150
G312	UA	E002	Sulfate, total	mg/L	03/30/21 - 08/09/23	10	0	CI around mean	721	367
G312	UA	E002	Thallium, total	mg/L	03/30/21 - 08/09/23	10	100	All ND - Last	0.002	0.00100
G312	UA	E002	Total Dissolved Solids	mg/L	03/30/21 - 08/09/23	10	0	CB around linear reg	1,420	1,010
G313	UA	E002	Antimony, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.003
G313	UA	E002	Arsenic, total	mg/L	03/30/21 - 08/09/23	11	82	CI around median	0.001	0.00430

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G313	UA	E002	Barium, total	mg/L	03/30/21 - 08/09/23	11	0	CB around linear reg	0.014	0.120
G313	UA	E002	Beryllium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.001
G313	UA	E002	Boron, total	mg/L	03/30/21 - 08/09/23	11	0	CI around mean	3.29	3.20
G313	UA	E002	Cadmium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.001
G313	UA	E002	Chloride, total	mg/L	03/30/21 - 08/09/23	11	9	CI around median	22	120
G313	UA	E002	Chromium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.0015	0.0110
G313	UA	E002	Cobalt, total	mg/L	03/30/21 - 08/09/23	11	82	CI around median	0.002	0.00560
G313	UA	E002	Fluoride, total	mg/L	03/30/21 - 08/09/23	11	9	CI around mean	0.227	0.411
G313	UA	E002	Lead, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.00630
G313	UA	E002	Lithium, total	mg/L	03/30/21 - 08/09/23	11	46	CI around median	0.02	0.0130
G313	UA	E002	Mercury, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.0002	0.00130
G313	UA	E002	Molybdenum, total	mg/L	03/30/21 - 08/09/23	11	18	CI around mean	0.00102	0.00150
G313	UA	E002	pH (field)	SU	03/30/21 - 08/09/23	11	0	CI around mean	6.8/7.0	6.6/7.3
G313	UA	E002	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/09/23	10	0	CI around mean	0.225	1.60
G313	UA	E002	Selenium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.00150
G313	UA	E002	Sulfate, total	mg/L	03/30/21 - 08/09/23	11	0	CB around T-S line	-517	367
G313	UA	E002	Thallium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.002	0.00100
G313	UA	E002	Total Dissolved Solids	mg/L	03/30/21 - 08/09/23	11	0	CI around mean	1,520	1,010
G314	LCU	E002	Antimony, total	mg/L	03/30/21 - 08/09/23	11	91	CI around median	0.003	0.003
G314	LCU	E002	Arsenic, total	mg/L	03/30/21 - 08/09/23	11	73	CI around median	0.001	0.00430
G314	LCU	E002	Barium, total	mg/L	03/30/21 - 08/09/23	11	0	CI around mean	0.0184	0.120
G314	LCU	E002	Beryllium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.001
G314	LCU	E002	Boron, total	mg/L	03/30/21 - 08/09/23	11	0	CI around geomean	0.134	3.20
G314	LCU	E002	Cadmium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.001
G314	LCU	E002	Chloride, total	mg/L	03/30/21 - 08/09/23	11	0	CI around median	30	120
G314	LCU	E002	Chromium, total	mg/L	03/30/21 - 08/09/23	11	91	CI around median	0.004	0.0110
G314	LCU	E002	Cobalt, total	mg/L	03/30/21 - 08/09/23	11	9	CI around mean	0.00334	0.00560

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G314	LCU	E002	Fluoride, total	mg/L	03/30/21 - 08/09/23	11	91	CI around median	0.25	0.411
G314	LCU	E002	Lead, total	mg/L	03/30/21 - 08/09/23	11	82	CI around median	0.001	0.00630
G314	LCU	E002	Lithium, total	mg/L	03/30/21 - 08/09/23	11	91	CI around median	0.02	0.0130
G314	LCU	E002	Mercury, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.0002	0.00130
G314	LCU	E002	Molybdenum, total	mg/L	03/30/21 - 08/09/23	11	0	CB around linear reg	-0.00436	0.00150
G314	LCU	E002	pH (field)	SU	03/30/21 - 08/09/23	11	0	CI around mean	6.5/6.8	6.6/7.3
G314	LCU	E002	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/09/23	10	0	CI around mean	0.511	1.60
G314	LCU	E002	Selenium, total	mg/L	03/30/21 - 08/09/23	11	82	CI around median	0.001	0.00150
G314	LCU	E002	Sulfate, total	mg/L	03/30/21 - 08/09/23	11	0	CI around median	2,000	367
G314	LCU	E002	Thallium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.002	0.00100
G314	LCU	E002	Total Dissolved Solids	mg/L	03/30/21 - 08/09/23	11	0	CI around median	3,400	1,010
G314D	DA	E002	Antimony, total	mg/L	03/30/21 - 08/09/23	8	100	All ND - Last	0.001	0.003
G314D	DA	E002	Arsenic, total	mg/L	03/30/21 - 08/09/23	8	50	CI around median	0.001	0.00430
G314D	DA	E002	Barium, total	mg/L	03/30/21 - 08/09/23	8	0	CI around mean	0.0287	0.120
G314D	DA	E002	Beryllium, total	mg/L	03/30/21 - 08/09/23	8	100	All ND - Last	0.001	0.001
G314D	DA	E002	Boron, total	mg/L	03/30/21 - 08/09/23	8	0	CI around mean	0.144	3.20
G314D	DA	E002	Cadmium, total	mg/L	03/30/21 - 08/09/23	8	100	All ND - Last	0.001	0.001
G314D	DA	E002	Chloride, total	mg/L	03/30/21 - 08/09/23	7	0	CI around mean	45.6	120
G314D	DA	E002	Chromium, total	mg/L	03/30/21 - 08/09/23	8	100	All ND - Last	0.0015	0.0110
G314D	DA	E002	Cobalt, total	mg/L	03/30/21 - 08/09/23	8	75	CI around median	0.002	0.00560
G314D	DA	E002	Fluoride, total	mg/L	03/30/21 - 08/09/23	7	0	CI around mean	0.526	0.411
G314D	DA	E002	Lead, total	mg/L	03/30/21 - 08/09/23	8	75	CI around median	0.001	0.00630
G314D	DA	E002	Lithium, total	mg/L	03/30/21 - 08/09/23	8	50	CB around linear reg	0.00992	0.0130
G314D	DA	E002	Mercury, total	mg/L	03/30/21 - 08/09/23	8	100	All ND - Last	0.0002	0.00130
G314D	DA	E002	Molybdenum, total	mg/L	03/30/21 - 08/09/23	8	0	CB around linear reg	-0.00896	0.00150
G314D	DA	E002	pH (field)	SU	03/30/21 - 08/09/23	8	0	CI around mean	6.9/7.3	6.6/7.3
G314D	DA	E002	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/09/23	8	0	CI around mean	1.5	1.60

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G314D	DA	E002	Selenium, total	mg/L	03/30/21 - 08/09/23	8	100	All ND - Last	0.001	0.00150
G314D	DA	E002	Sulfate, total	mg/L	03/30/21 - 08/09/23	7	0	CI around mean	735	367
G314D	DA	E002	Thallium, total	mg/L	03/30/21 - 08/09/23	8	100	All ND - Last	0.002	0.00100
G314D	DA	E002	Total Dissolved Solids	mg/L	03/30/21 - 08/09/23	7	0	CI around mean	1,760	1,010
G315	UA	E002	Antimony, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.001	0.003
G315	UA	E002	Arsenic, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.001	0.00430
G315	UA	E002	Barium, total	mg/L	03/30/21 - 08/10/23	11	0	CI around mean	0.0204	0.120
G315	UA	E002	Beryllium, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.001	0.001
G315	UA	E002	Boron, total	mg/L	03/30/21 - 08/10/23	11	0	CI around median	1.2	3.20
G315	UA	E002	Cadmium, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.001	0.001
G315	UA	E002	Chloride, total	mg/L	03/30/21 - 08/10/23	11	0	CI around median	12	120
G315	UA	E002	Chromium, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.0015	0.0110
G315	UA	E002	Cobalt, total	mg/L	03/30/21 - 08/10/23	11	91	CI around median	0.002	0.00560
G315	UA	E002	Fluoride, total	mg/L	03/30/21 - 08/10/23	11	0	CI around mean	0.263	0.411
G315	UA	E002	Lead, total	mg/L	03/30/21 - 08/10/23	11	91	CI around median	0.001	0.00630
G315	UA	E002	Lithium, total	mg/L	03/30/21 - 08/10/23	11	91	CI around median	0.02	0.0130
G315	UA	E002	Mercury, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.0002	0.00130
G315	UA	E002	Molybdenum, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.0015	0.00150
G315	UA	E002	pH (field)	SU	03/30/21 - 08/10/23	11	0	CI around mean	6.8/6.9	6.6/7.3
G315	UA	E002	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/10/23	10	0	CI around mean	0.122	1.60
G315	UA	E002	Selenium, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.001	0.00150
G315	UA	E002	Sulfate, total	mg/L	03/30/21 - 08/10/23	11	0	CB around T-S line	-468	367
G315	UA	E002	Thallium, total	mg/L	03/30/21 - 08/10/23	11	100	All ND - Last	0.002	0.00100
G315	UA	E002	Total Dissolved Solids	mg/L	03/30/21 - 08/10/23	11	0	CI around mean	1,290	1,010
G316	LCU	E002	Antimony, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.003
G316	LCU	E002	Arsenic, total	mg/L	03/30/21 - 08/09/23	11	0	CI around mean	0.00681	0.00430
G316	LCU	E002	Barium, total	mg/L	03/30/21 - 08/09/23	11	0	CI around mean	0.0616	0.120

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 3, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
G316	LCU	E002	Beryllium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.001
G316	LCU	E002	Boron, total	mg/L	03/30/21 - 08/09/23	11	0	CI around mean	0.363	3.20
G316	LCU	E002	Cadmium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.001
G316	LCU	E002	Chloride, total	mg/L	03/30/21 - 08/09/23	11	0	CI around median	23	120
G316	LCU	E002	Chromium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.0015	0.0110
G316	LCU	E002	Cobalt, total	mg/L	03/30/21 - 08/09/23	11	0	CB around linear reg	0.00218	0.00560
G316	LCU	E002	Fluoride, total	mg/L	03/30/21 - 08/09/23	11	54	CI around median	0.25	0.411
G316	LCU	E002	Lead, total	mg/L	03/30/21 - 08/09/23	11	91	CI around median	0.001	0.00630
G316	LCU	E002	Lithium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.003	0.0130
G316	LCU	E002	Mercury, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.0002	0.00130
G316	LCU	E002	Molybdenum, total	mg/L	03/30/21 - 08/09/23	11	0	CI around mean	0.00368	0.00150
G316	LCU	E002	pH (field)	SU	03/30/21 - 08/09/23	11	0	CI around mean	6.9/7.1	6.6/7.3
G316	LCU	E002	Radium 226 + Radium 228, total	pCi/L	03/30/21 - 08/09/23	10	0	CI around geomean	0.26	1.60
G316	LCU	E002	Selenium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.001	0.00150
G316	LCU	E002	Sulfate, total	mg/L	03/30/21 - 08/09/23	11	0	CI around median	660	367
G316	LCU	E002	Thallium, total	mg/L	03/30/21 - 08/09/23	11	100	All ND - Last	0.002	0.00100
G316	LCU	E002	Total Dissolved Solids	mg/L	03/30/21 - 08/09/23	11	0	CI around median	1,600	1,010

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 3, 2023
845 QUARTERLY REPORT
COFFEEN POWER PLANT
ASH POND NO. 1
COFFEEN, IL

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

- DA = Deep Aquifer
- LCU = Lower Confining Unit
- UA = Uppermost Aquifer

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

- All ND - Last = All results were below the reporting limit, and the last determined reporting limit is shown
- CB around T-S line = Confidence band around Thiel-Sen line
- CB around linear reg = Confidence band around linear regression
- CI around geomean = Confidence interval around the geometric mean
- CI around mean = Confidence interval around the mean
- CI around median = Confidence interval around the median

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