



Dynegy Midwest Generation, LLC
1500 Eastport Plaza Dr.
Collinsville, IL 62234

January 30, 2025

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

Re: Vermilion North Ash Pond/Old East Ash Pond (IEPA ID: W1838000002-01, 03) 2024 Annual Consolidated Report

Dear Mr. LeCrone:

In accordance with 35 IAC § 845.550, Dynegy Midwest Generation, LLC (DMG) is submitting the annual consolidated report for the Vermilion North Ash Pond/Old East Ash Pond (IEPA ID: W1838000002-01, 03), as enclosed.

Sincerely,

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

Dianna Tickner
Sr. Director Decommissioning & Demolition

Enclosures

Annual Consolidated Report
Dynergy Midwest Generation, LLC
Vermilion Power Plant
North Ash Pond/Old East Ash Pond; W1838000002-01, 03

In accordance with 35 IAC § 845.550, Dynergy Midwest Generation, LLC (DMG) 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 Vermilion Power Plant

Prepared for:

**Owner/Operator:
Dynergy Midwest Generation, LLC
1500 Eastport Plaza Drive
Collinsville, IL 62234**

**Facility Address:
Vermilion Power Plant
10188 East 2150 North Rd
Oakwood, IL 61858
IEPA ID # W1838000002 - 01,03,04**

**Report
Completed
December
2024**

**Vermilion Power Plant
ANNUAL CCR FUGITIVE DUST CONTROL REPORT**

Reporting Year: 4th quarter 2023 - 3rd quarter 2024

Completed by: 
Name

Sr. Director, Decommissioning and Demolition
Title

This Annual CCR Fugitive Dust Control Report has been prepared for the Vermilion Power Plant in accordance with 40 CFR 257.80 (c) and 35 I.A.C. 845.500 (c). Section 1 provides a description of the actions taken to control CCR fugitive dust at the facility during the reporting year, including a summary of any corrective measures taken. Section 2 provides a record of citizen complaints received concerning CCR fugitive dust at the facility during the reporting year, including a summary of any corrective measures taken.

Section 1: Actions Taken to Control CCR Fugitive Dust

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

Table: Control Measures for CCR Management in CCR Surface Impoundments

CCR Activity	CCR Fugitive Dust Control Measures	Applicability and Appropriateness of Control Measures
Management of CCR in the facility's CCR unit	Water dry CCR material disturbed during routine maintenance, as necessary.	Wetting CCR reduces the potential for CCR fugitive dust generation during handling of CCR during routine maintenance if handling is required.
	Water areas of exposed CCR in CCR surface impoundments, as necessary.	Water will be applied to areas of exposed CCR to maintain moisture content to minimize the potential for CCR fugitive dust generation in excessively dry or windy conditions.
	Allow naturally occurring grass vegetation to develop in areas of exposed CCR in CCR surface impoundments, as necessary.	Vegetation provides a wind screen and/or cover to reduce wind entrainment of CCR.
	Apply chemical dust suppressant on areas of exposed CCR in CCR surface impoundments, as necessary.	Mixing an appropriate chemical dust suppressant with water and applying to areas of exposed CCR will minimize the potential for CCR fugitive dust generation in excessively dry or windy conditions.

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. The Vermilion Power Plant ceased to operate in 2011.

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.

Section 2: Record of Citizen Complaints

In the event the owner or operator of the facility receives a citizen complaint involving a CCR fugitive dust event at the facility, relevant information about the complaint will be logged.

Information that will be recorded includes, as applicable:

- Date/Time the complaint is received.

- Date/Time the complaint is received
- Date/Time and duration of the CCR fugitive dust event
- Description of the nature of the CCR fugitive dust event
- Name of the citizen entering the complaint (if provided)
- Address & phone number of citizen entering the complaint (if provided)
- Name of the personnel who took the complaint
- All actions taken to assess and resolve the complaint.

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

Section 2

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

- A) Annual hazard potential classification certification, if applicable (Section 845.440)
- B) Annual structural stability assessment certification, if applicable (Section 845.450)
- C) Annual safety factor assessment certification, if applicable (Section 845.460)
- D) Inflow design flood control system plan certification (Section 845.510(c))

ANNUAL INSPECTION BY A QUALIFIED PROFESSIONAL ENGINEER

35 IAC § 845.540

(b)(1) The CCR surface impoundment must be inspected on an annual basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR surface impoundment is consistent with recognized and generally accepted engineering standards. The inspection must, at a minimum, include:

A) A review of available information regarding the status and condition of the CCR surface impoundment, including files available in the operating record (e.g., CCR surface impoundment design and construction information required by Sections 845.220(a)(1) and 845.230(d)(2)(A), previous structural stability assessments required under Section 845.450, the results of inspections by a qualified person, and results of previous annual inspections);

B) A visual inspection of the CCR surface impoundment to identify signs of distress or malfunction of the CCR surface impoundment and appurtenant structures;

C) A visual inspection of any hydraulic structures underlying the base of the CCR surface impoundment or passing through the dike of the CCR surface impoundment for structural integrity and continued safe and reliable operation;

D) The annual hazard potential classification certification, if applicable (see Section 845.440);

E) The annual structural stability assessment certification, if applicable (see Section 845.450);

F) The annual safety factor assessment certification, if applicable (see Section 845.460); and

G) The inflow design flood control system plan certification (see Section 845.510(c)).

SITE INFORMATION

Site Name / Address / Date of Inspection	Vermilion Power Station Vermilion County, Illinois 61858 9/20/2024
Operator Name / Address	Dynegy Midwest Generation, LLC 1500 Eastport Plaza Drive, Collinsville, IL 62234
CCR unit	North Ash Pond

INSPECTION REPORT 35 IAC § 845.540

(b)(1)(D) The annual hazard potential classification certification, if applicable (see Section 845.440).	Based on a review of the CCR unit's annual hazard potential classification, the unit is classified as a Class II CCR surface impoundment.
(b)(2)(A) Any changes in geometry of the structure since the previous annual inspection.	Based on a review of the CCR unit's records and visual observation during the on-site inspection, no changes in geometry of the structure have taken place since the previous annual inspection.
(b)(2)(B) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection	There is currently no active instrumentation at the site
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 700 acre-feet
(b)(2)(E) The approximate volume of the impounded water and CCR contained in the unit at the time of the inspection.	Approximately 500 acre-feet
(b)(2)(F) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit	Based on a review of the CCR unit's records and visual observation during the on-site inspection, there was no appearance of an actual or potential structural weakness of the CCR unit, nor an existing condition that is disrupting or would disrupt the operation and safety of the unit.

INSPECTION REPORT 35 IAC § 845.540

(b)(2)(G) Any other changes that may have affected the stability or operation of the impounding structure since the previous annual inspection.

Based on a review of the CCR unit's records and visual observation during the on-site inspection, no other changes which may have affected the stability or operation of the CCR unit have taken place since the previous annual inspection.

(b)(1)(G) The inflow design flood control system plan certification (see Section 845.510(c))

Based on a review of the CCR unit's records, the CCR unit is designed, operated, and maintained to adequately manage the flow from the CCR impoundment and control the peak discharge from the inflow design flood.

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

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



Illinois PE No. 062-054206, Expires: 11/30/2025

Date: 12/13/2024

Site Name: Vermilion Power Station

CCR Unit: North Ash Pond

35 IAC § 845.540 (b)(2)(B)

Instrument ID #	Type	Maximum recorded reading since previous annual inspection (ft)
No active instrumentation		

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		585			8	
CCR	580		600			20

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	Vermilion Power Station Vermilion County, Illinois 61858 9/20/2024
Operator Name / Address	Dynegy Midwest Generation, LLC 1500 Eastport Plaza Drive, Collinsville, IL 62234
CCR unit	Old East Ash Pond

INSPECTION REPORT 35 IAC § 845.540

(b)(1)(D) The annual hazard potential classification certification, if applicable (see Section 845.440).	Based on a review of the CCR unit's annual hazard potential classification, the unit is classified as a Class II CCR surface impoundment.
(b)(2)(A) Any changes in geometry of the structure since the previous annual inspection.	Based on a review of the CCR unit's records and visual observation during the on-site inspection, no changes in geometry of the structure have taken place since the previous annual inspection.
(b)(2)(B) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection	There is currently no active instrumentation at the site
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 800 acre-feet.
(b)(2)(E) The approximate volume of the impounded water and CCR contained in the unit at the time of the inspection.	Approximately 700 acre-feet
(b)(2)(F) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit	Based on a review of the CCR unit's records and visual observation during the on-site inspection, there was no appearance of an actual or potential structural weakness of the CCR unit, nor an existing condition that is disrupting or would disrupt the operation and safety of the unit.

INSPECTION REPORT 35 IAC § 845.540

(b)(2)(G) Any other changes that may have affected the stability or operation of the impounding structure since the previous annual inspection.	Based on a review of the CCR unit's records and visual observation during the on-site inspection, no other changes which may have affected the stability or operation of the CCR unit have taken place since the previous annual inspection.
(b)(1)(G) The inflow design flood control system plan certification (see Section 845.510(c))	Unit has no inflow or water impounded.

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.



Illinois PE No. 062-054206, Expires: 11/30/2025

Date: 12/13/2024

Site Name: Vermilion Power Station

CCR Unit: Old East Ash Pond

35 IAC § 845.540 (b)(2)(B)

Instrument ID #	Type	Maximum recorded reading since previous annual inspection (ft)
No active instrumentation		

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		0			0	
CCR	580		630			50

Section 3

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

Prepared for
Dynegy Midwest Generation, LLC

Date
January 31, 2025

Project No.
1940103649-014

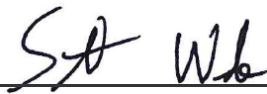
**2024 35 I.A.C. § 845 ANNUAL
GROUNDWATER MONITORING AND
CORRECTIVE ACTION REPORT
NORTH ASH POND AND OLD EAST ASH POND
VERMILION POWER PLANT
OAKWOOD, ILLINOIS
IEPA ID NO. W1838000002-01 AND
W1838000002-03**

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

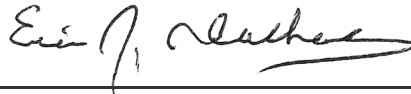
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Prepared by **Scott S. Woods**
Checked by **Lauren D. Cook**
Approved by **Eric J. Tlachac, PE**
Description **Annual Report required by 35 I.A.C. § 845**

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

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



Scott S. Woods
Hydrogeologist



Eric J. Tlachac, PE
Senior Project Manager

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TABLES (IN TEXT)

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

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

FIGURES (ATTACHED)

Figure 1	Monitoring Well Location Map
Figure 2	GWPS Exceedance Map Uppermost Aquifer, Quarter 4, 2023 and Quarters 1-3, 2024
Figure 3	GWPS Exceedance Map Lower Groundwater Unit, Quarter 4, 2023 and Quarters 1-3, 2024
Figure 4	Potentiometric Surface Map, January 24, 2024
Figure 5	Potentiometric surface Map, February 19, 2024
Figure 6	Potentiometric Surface Map, March 6, 2024
Figure 7	Potentiometric surface Map, April 6, 2024
Figure 8	Potentiometric Surface Map, May 6, 2024
Figure 9	Potentiometric Surface Map, June 29, 2024
Figure 10	Potentiometric Surface Map, July 29, 2024
Figure 11	Potentiometric Surface Map, August 21, 2024
Figure 12	Potentiometric Surface Map, September 21, 2024
Figure 13	Potentiometric Surface Map, October 21, 2024
Figure 14	Potentiometric Surface Map, November 12, 2024
Figure 15	Potentiometric Surface Map, December 6, 2024

ATTACHMENTS

- Attachment A Groundwater Elevation Data
- Attachment B Comparison to Background – Quarter 1, 2024
Comparison to Background – Quarter 2, 2024
Comparison to Background – Quarter 3, 2024

ACRONYMS AND ABBREVIATIONS

35 I.A.C.	Title 35 of the Illinois Administrative Code
ASD	Alternative Source Demonstration
CCA	compliance commitment agreement
CCR	coal combustion residuals
CMA	assessment of corrective measures
DMG	Dynegy Midwest Generation, LLC
E003	Quarter 4, 2023 sampling event
E004	Quarter 1, 2024 sampling event
E005	Quarter 2, 2024 sampling event
E006	Quarter 3, 2024 sampling event
E007	Quarter 4 2024 sampling event
GWPS	groundwater protection standard
ID	identification
IEPA	Illinois Environmental Protection Agency
NAP/OEAP	North Ash Pond and Old East Ash Pond
No.	number
Ramboll	Ramboll Americas Engineering Solutions, Inc.
SI	surface impoundment
SSI	statistically significant increase
TDS	total dissolved solids
VPP	Vermilion Power Plant

EXECUTIVE SUMMARY

This report has been prepared to provide the information required by Title 35 of the Illinois Administrative Code (35 I.A.C.) § 845.610(e) (*Annual Groundwater Monitoring and Corrective Action Report*) for the North Ash Pond and Old East Ash Pond (NAP/OEAP) located at Vermilion Power Plant (VPP) near Oakwood, Illinois. The NAP/OEAP is recognized by coal combustion residuals (CCR) unit identification (ID) number (No.) 910/911 and Illinois Environmental Protection Agency (IEPA) ID No. W1838000002-01 and W1838000002-03.

As required by 35 I.A.C. § 845, an operating permit application for the NAP/OEAP was submitted by Dynegy Midwest Generation (DMG), LLC to the IEPA by October 31, 2021 in accordance with the requirements specified in 35 I.A.C. § 845.230(d) and is pending approval. Consistent with compliance commitment agreements (CCAs) between other facility owners and the IEPA dated December 28, 2022, groundwater monitoring in accordance with the proposed groundwater monitoring plan and sampling methodologies provided in the operating permit application for the NAP/OEAP commenced in the second quarter of 2023. Quarterly groundwater sampling was conducted in 2024 in accordance with 35 I.A.C. § 845.650. All available groundwater monitoring data collected in 2024 are summarized in **Table 1** (field parameters and analytical results) and **Attachment A** (groundwater elevation data). After the NAP/OEAP has been issued an approved operating permit, groundwater monitoring shall be conducted in accordance with that operating permit.

A closure and groundwater corrective action construction permit application for the NAP/OEAP was also submitted by DMG to the IEPA on January 28, 2022 in accordance with the requirements specified in 35 I.A.C. § 845.220(a) and (d) and is pending approval.

Monitoring wells 40 and 103 were abandoned and replaced with monitoring wells 72 and 103R, respectively, in December 2024. Updates to the Groundwater Monitoring Plan (Ramboll, 2021) will be considered following IEPA review and approval of an operating permit.

In accordance with 35 I.A.C. § 845.610(b)(3)(C) and the statistical analysis plan submitted with the operating permit application (Appendix A of the Groundwater Monitoring Plan [Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2021]), constituent concentrations observed at compliance monitoring wells were evaluated for compliance with the groundwater protection standards (GWPSs) described in 35 I.A.C. § 845.600 to determine exceedances¹ of the GWPS (**Table 2**). The following GWPS exceedances were determined in 2024 (Ramboll, 2024a; Ramboll, 2024b; Ramboll, 2024c)²:

- Boron in 03R, 04, 05, 07R, 08R, 17, 36, 40, and 41
- Lithium in 04, 05, 07R, 08R, 36, and 40
- Molybdenum in 03R, 07R, 08R, 36

¹ Throughout this document, "exceedance" or "exceedances" is intended to refer only to potential exceedances of proposed applicable background statistics or Groundwater Protection Standards (GWPSs) as described in the proposed groundwater monitoring program which was submitted to the IEPA on October 25, 2021 as part of DMG's operating permit application for the NAP and the OEAP. That operating permit application, including the proposed groundwater monitoring program, remains under review by the IEPA and, therefore, DMG has not identified any actual exceedances.

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

- Sulfate in 03R, 07R, 08R, 17, 36, and 40
- Total Dissolved Solids (TDS) in 07R, 17, 36, and 40

An Alternative Source Demonstration (ASD) was not completed for the GWPS exceedances listed above. Therefore, these exceedances will be addressed in accordance with 35 I.A.C. § 845.660. The assessment of corrective measures (CMA) was submitted with the closure and groundwater corrective action construction permit application on January 28, 2022 (Geosyntec Consultants, 2022; Gradient, 2022). The CMA was the first step towards developing a Corrective Action Plan, which will ultimately select a remedy to address all GWPS exceedances at the NAP-OEAP. The selected remedy will meet the performance standards of 35 I.A.C. § 845.670(d) and the Corrective Action Plan will be submitted to the Agency on or before May 27, 2025. Once implemented and completed, the selected remedy will attain the GWPSs. Remedial activities have not been initiated under 35 I.A.C. § 845.780 in 2024.

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

1. INTRODUCTION

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

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

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

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

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

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

This report provides the required information for the VPP NAP/OEAP for calendar year 2024.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

An operating permit application for the NAP/OEAP was submitted by DMG to IEPA by October 31, 2021 in accordance with the requirements specified in 35 I.A.C. § 845.230(d) and is pending approval. Consistent with the CCA entered into between other facility owners and IEPA, groundwater monitoring in accordance with the proposed groundwater monitoring plan and sampling methodologies provided in the operating permit application for the NAP/OEAP commenced in the second quarter of 2023. After the NAP/OEAP has been issued an approved operating permit, groundwater monitoring shall be conducted in accordance with that operating permit.

A closure and groundwater corrective action construction permit application for the NAP/OEAP was also submitted by DMG to the IEPA on January 28, 2022 in accordance with the requirements specified in 35 I.A.C. § 845.220(a) and (d) and is pending approval.

As noted in the **Executive Summary**, GWPS exceedances were determined for the NAP/OEAP in 2024. 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 submitted with the closure and groundwater corrective action construction permit application January 28, 2022. The CMA was the first step towards developing a Corrective Action Plan, which will ultimately select a remedy to address all GWPS exceedances at the NAP-OEAP. The selected remedy will meet the performance standards of 35 I.A.C. § 845.670(d) and the Corrective Action Plan will be submitted to the Agency on or before May 27, 2025. Once implemented and completed, the selected remedy will attain the GWPSs. Remedial activities have not been initiated under 35 I.A.C. § 845.780 in 2024.

3. KEY ACTIONS COMPLETED IN 2024

The proposed 35 I.A.C. § 845 monitoring system is presented in **Figure 1**. Monitoring wells 40 and 103 were abandoned and replaced with monitoring wells 72 and 103R, respectively, in November and December 2024. Updates to the Groundwater Monitoring Plan (Ramboll, 2021) will be considered following IEPA review and approval of an operating permit.

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

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

3.1 Sample and Analysis Summary

One groundwater sample was collected from each background and compliance well during each quarterly monitoring event in 2024³. All samples were collected and analyzed in accordance with the Groundwater Monitoring Plan provided in the operating permit application (Ramboll, 2021). A summary of the samples collected from background and compliance monitoring wells in 2024 is included in **Table A** on the following page. **Table 1** is a summary of the field parameters and analytical results from the 2024 sampling events. Laboratory analytical reports and field data sheets were provided in the quarterly Groundwater Monitoring Data and Detected Exceedances Reports for Quarter 1 through 3 (Ramboll, 2024a; Ramboll, 2024b; Ramboll, 2024c); therefore, these reports are not attached to this annual report to avoid reproduction of lengthy data transmittals that have been previously provided in hardcopy. Laboratory report and field data sheets will be provided in the fourth quarter Groundwater Monitoring Data and Detected Exceedance Report, therefore, will not be attached to this annual report to avoid reproduction of lengthy data transmittals that will be provided in hardcopy.

³ Submersible pumps were temporarily removed from monitoring wells 02, 07R, 17, 36, 37, and 40 after the Quarter 2, 2024 sampling event due to the possible risk of damage by onsite activities related to the construction of the groundwater extraction trench north of the Old East Ash Pond; therefore, groundwater elevations were not collected for this sampling event. Monitoring well 40 was abandoned on June 4, 2024; therefore groundwater elevation was not measured and a groundwater sample was not collected during this sampling event. A groundwater elevation was not collected from monitoring well 34 during this sampling event due to a fallen tree. Groundwater samples were not collected from monitoring wells 101 and 103 during the July 2024 sampling event due to deep water levels that exceeded the capability of the submersible pump. During the October 2024 sampling event pore water well ND3 and monitoring well 08R were dry at time of sampling; therefore, groundwater elevations were not collected.

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

Event ID	Sampling Dates ^{1, 2, 3}	Analytical Data Receipt Date	Exceedance Determination Date	ASD Completion Date
E003	November 27 – 29, 2023	January 9, 2024	March 9, 2024 ⁵	NA
E004 ⁶	February 20 – 21, 2024	March 26, 2024	May 25, 2024	NA
E005	May 7 – June 6, 2024	July 11, 2024	September 9, 2024	NA
E006 ⁷	July 29 – August 1, 2024	August 30, 2024	October 29, 2024	NA
E007 ⁸	October 22 – 24, 2024	December 4, 2024	TBD ⁴	NA

Notes:

ASD: Alternative Source Demonstration

NA: not applicable

TBD: to be determined after January 31, 2025

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

² The following background wells were sampled for each event: 21, 42, 43, 101, 103

³ The following compliance wells were sampled for each event unless otherwise noted: 02, 03R, 04, 05, 07R, 08R, 17, 20, 34, 36, 37, 38, 40, and 41

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

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

⁶ Compliance monitoring well 17 purged dry; therefore, a groundwater sample was not collected.

⁷ Submersible pumps were temporarily removed from monitoring wells 02, 07R, 17, 36, and 37 after the Quarter 2, 2024 sampling event due to the possible risk of damage by onsite activities related to the construction of the groundwater extraction trench north of the Old East Ash Pond; therefore, groundwater samples and groundwater elevations were not collected for this sampling event. Monitoring well 40 was abandoned on June 4, 2024; therefore a groundwater sample was not collected during this sampling event. Groundwater elevations and samples were not collected from monitoring well 34 during this sampling event due to a fallen tree. Groundwater samples were not collected from monitoring wells 101 and 103 during this sampling event due to deep water levels that exceeded the capability of the submersible pump.

⁸ Compliance monitoring well 08R was dry at time of sampling and compliance monitoring well 17 was purged dry during sampling; therefore, no groundwater samples were collected.

3.2 Exceedances of GWPS

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

- Boron in 03R, 04, 05, 07R, 08R, 17, 36, 40, and 41
- Lithium in 04, 05, 07R, 08R, 36, and 40
- Molybdenum in 03R, 07R, 08R, 36
- Sulfate in 03R, 07R, 08R, 17, 36, and 40
- TDS in 07R, 17, 36, and 40

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

3.3 Exceedances of Background

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

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

4. PROBLEMS ENCOUNTERED AND ACTIONS TO RESOLVE THE PROBLEMS

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

5. KEY ACTIVITIES PLANNED FOR 2025

The following key activities are planned for 2025:

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

6. REFERENCES

Geosyntec Consultants, 2022. *Construction Permit Application*. Vermilion Power Plant, Old East Ash Pond Area, North Ash Pond Area, Oakwood, Illinois. Dynegy Midwest Generation, LLC. January 2022.

Gradient, 2022. Closure Alternative Analysis and Corrective Measures Assessment/Corrective Action Alternatives Analysis for the North Ash Pond/Old East Ash Pond (NAP/OEAP) and New East Ash Pond (NEAP). Vermilion Power Plant, Oakwood, Illinois. January 28, 2022.

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*. Vermilion Power Plant, North Ash Pond and Old East Ash Pond, Oakwood, Illinois. Dynegy Midwest Generation, LLC. October 25, 2021.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2024a. 35 I.A.C. § 845.610(B)(3)(D) Groundwater Monitoring Data and Detected Exceedances, 2024 Quarter 1, North Ash Pond (NAP) and Old East Ash Pond (OEAP), Vermilion Power Plant, Oakwood, Illinois. May 25, 2024.

<https://www.luminant.com/documents/ccr/il-ccr/Vermilion/2024/2024-VE%20NAP%20OEAP%202024%201st%20qtr%2035%20IAC%20845%20GW%20report-Vermilion-Old%20East%20and%20North%20Ash%20Ponds-W1838000002%E2%80%90001-03.pdf>

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2024b. 35 I.A.C. § 845.610(B)(3)(D) Groundwater Monitoring Data and Detected Exceedances, 2024 Quarter 2, North Ash Pond (NAP) and Old East Ash Pond (OEAP), Vermilion Power Plant, Oakwood, Illinois. September 9, 2024.

<https://www.luminant.com/documents/ccr/il-ccr/Vermilion/2024/2024-VE%20NAP%20OEAP%202024%202nd%20qtr%2035%20IAC%20845%20GW%20report-Vermilion-Old%20East%20and%20North%20Ash%20Ponds-W1838000002%E2%80%90001-03.pdf>

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2024c. 35 I.A.C. § 845.610(B)(3)(D) Groundwater Monitoring Data and Detected Exceedances, 2024 Quarter 3, North Ash Pond (NAP) and Old East Ash Pond (OEAP), Vermilion Power Plant, Oakwood, Illinois. October 29, 2024.

<https://www.luminant.com/documents/ccr/il-ccr/Vermilion/2024/2024-VE%20NAP%20OEAP%202024%203rd%20qtr%2035%20IAC%20845%20GW%20report-Vermilion-Old%20East%20and%20North%20Ash%20Ponds-W1838000002%E2%80%90001-03.pdf>

TABLES

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
21	Background	E004	02/20/2024	Antimony, total	0.0013 U	mg/L
21	Background	E004	02/20/2024	Arsenic, total	0.0550	mg/L
21	Background	E004	02/20/2024	Barium, total	0.140	mg/L
21	Background	E004	02/20/2024	Beryllium, total	0.00053 U	mg/L
21	Background	E004	02/20/2024	Boron, total	0.570 J+	mg/L
21	Background	E004	02/20/2024	Cadmium, total	0.00017 U	mg/L
21	Background	E004	02/20/2024	Calcium, total	150	mg/L
21	Background	E004	02/20/2024	Chloride, total	1.60	mg/L
21	Background	E004	02/20/2024	Chromium, total	0.003 J	mg/L
21	Background	E004	02/20/2024	Cobalt, total	0.0004 U	mg/L
21	Background	E004	02/20/2024	Dissolved Oxygen	0.260	mg/L
21	Background	E004	02/20/2024	Fluoride, total	0.770	mg/L
21	Background	E004	02/20/2024	Lead, total	0.0005 UJ	mg/L
21	Background	E004	02/20/2024	Lithium, total	0.002 J	mg/L
21	Background	E004	02/20/2024	Mercury, total	0.000079 U	mg/L
21	Background	E004	02/20/2024	Molybdenum, total	0.0041 J	mg/L
21	Background	E004	02/20/2024	Oxidation Reduction Potential	-143	mV
21	Background	E004	02/20/2024	pH (field)	7.4	SU
21	Background	E004	02/20/2024	Radium 226 + Radium 228, total	0.608	pCi/L
21	Background	E004	02/20/2024	Selenium, total	0.00098 U	mg/L
21	Background	E004	02/20/2024	Specific Conductance @ 25C (field)	886	micromhos/cm
21	Background	E004	02/20/2024	Sulfate, total	390	mg/L
21	Background	E004	02/20/2024	Temperature	12.2	degrees C
21	Background	E004	02/20/2024	Thallium, total	0.00057 U	mg/L
21	Background	E004	02/20/2024	Total Dissolved Solids	870	mg/L
21	Background	E004	02/20/2024	Turbidity, field	23.1	NTU
42	Background	E004	02/20/2024	Antimony, total	0.0013 U	mg/L
42	Background	E004	02/20/2024	Arsenic, total	0.0300	mg/L
42	Background	E004	02/20/2024	Barium, total	0.160	mg/L
42	Background	E004	02/20/2024	Beryllium, total	0.00053 U	mg/L
42	Background	E004	02/20/2024	Boron, total	0.710	mg/L
42	Background	E004	02/20/2024	Cadmium, total	0.00017 U	mg/L
42	Background	E004	02/20/2024	Calcium, total	97.0	mg/L
42	Background	E004	02/20/2024	Chloride, total	15.0	mg/L
42	Background	E004	02/20/2024	Chromium, total	0.005 UJ	mg/L
42	Background	E004	02/20/2024	Cobalt, total	0.0006 J	mg/L
42	Background	E004	02/20/2024	Dissolved Oxygen	1.25	mg/L
42	Background	E004	02/20/2024	Fluoride, total	0.550	mg/L
42	Background	E004	02/20/2024	Lead, total	0.000810 J+	mg/L
42	Background	E004	02/20/2024	Lithium, total	0.0024 J	mg/L
42	Background	E004	02/20/2024	Mercury, total	0.000079 U	mg/L
42	Background	E004	02/20/2024	Molybdenum, total	0.0025 U	mg/L
42	Background	E004	02/20/2024	Oxidation Reduction Potential	-156	mV
42	Background	E004	02/20/2024	pH (field)	7.5	SU
42	Background	E004	02/20/2024	Radium 226 + Radium 228, total	1.23	pCi/L
42	Background	E004	02/20/2024	Selenium, total	0.00098 U	mg/L

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VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
42	Background	E004	02/20/2024	Specific Conductance @ 25C (field)	802	micromhos/cm
42	Background	E004	02/20/2024	Sulfate, total	96.0	mg/L
42	Background	E004	02/20/2024	Temperature	10.5	degrees C
42	Background	E004	02/20/2024	Thallium, total	0.00057 U	mg/L
42	Background	E004	02/20/2024	Total Dissolved Solids	590	mg/L
42	Background	E004	02/20/2024	Turbidity, field	82.0	NTU
43	Background	E004	02/20/2024	Antimony, total	0.0013 U	mg/L
43	Background	E004	02/20/2024	Arsenic, total	0.0110 J	mg/L
43	Background	E004	02/20/2024	Barium, total	0.470	mg/L
43	Background	E004	02/20/2024	Beryllium, total	0.00053 U	mg/L
43	Background	E004	02/20/2024	Boron, total	0.300 J+	mg/L
43	Background	E004	02/20/2024	Cadmium, total	0.00017 U	mg/L
43	Background	E004	02/20/2024	Calcium, total	8.10 J	mg/L
43	Background	E004	02/20/2024	Chloride, total	59.0	mg/L
43	Background	E004	02/20/2024	Chromium, total	0.0025 J	mg/L
43	Background	E004	02/20/2024	Cobalt, total	0.00063 J	mg/L
43	Background	E004	02/20/2024	Dissolved Oxygen	0.160	mg/L
43	Background	E004	02/20/2024	Fluoride, total	0.420	mg/L
43	Background	E004	02/20/2024	Lead, total	0.00100 J+	mg/L
43	Background	E004	02/20/2024	Lithium, total	0.0120	mg/L
43	Background	E004	02/20/2024	Mercury, total	0.000079 U	mg/L
43	Background	E004	02/20/2024	Molybdenum, total	0.0025 U	mg/L
43	Background	E004	02/20/2024	Oxidation Reduction Potential	-129	mV
43	Background	E004	02/20/2024	pH (field)	7.1	SU
43	Background	E004	02/20/2024	Radium 226 + Radium 228, total	0.917	pCi/L
43	Background	E004	02/20/2024	Selenium, total	0.00098 U	mg/L
43	Background	E004	02/20/2024	Specific Conductance @ 25C (field)	1,253	micromhos/cm
43	Background	E004	02/20/2024	Sulfate, total	250	mg/L
43	Background	E004	02/20/2024	Temperature	11.1	degrees C
43	Background	E004	02/20/2024	Thallium, total	0.00057 U	mg/L
43	Background	E004	02/20/2024	Total Dissolved Solids	1,000	mg/L
43	Background	E004	02/20/2024	Turbidity, field	52	NTU
101	Background	E004	02/20/2024	Antimony, total	0.0013 U	mg/L
101	Background	E004	02/20/2024	Arsenic, total	0.0470	mg/L
101	Background	E004	02/20/2024	Barium, total	0.110	mg/L
101	Background	E004	02/20/2024	Beryllium, total	0.00053 U	mg/L
101	Background	E004	02/20/2024	Boron, total	2.30	mg/L
101	Background	E004	02/20/2024	Cadmium, total	0.00017 U	mg/L
101	Background	E004	02/20/2024	Calcium, total	74.0	mg/L
101	Background	E004	02/20/2024	Chloride, total	26.0	mg/L
101	Background	E004	02/20/2024	Chromium, total	0.0013 J	mg/L
101	Background	E004	02/20/2024	Cobalt, total	0.00046 J	mg/L
101	Background	E004	02/20/2024	Dissolved Oxygen	0.140	mg/L
101	Background	E004	02/20/2024	Fluoride, total	0.750	mg/L
101	Background	E004	02/20/2024	Lead, total	0.000500 J+	mg/L
101	Background	E004	02/20/2024	Lithium, total	0.0190	mg/L

TABLE 1.
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845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
101	Background	E004	02/20/2024	Mercury, total	0.000079 U	mg/L
101	Background	E004	02/20/2024	Molybdenum, total	0.0025 U	mg/L
101	Background	E004	02/20/2024	Oxidation Reduction Potential	-152	mV
101	Background	E004	02/20/2024	pH (field)	7.4	SU
101	Background	E004	02/20/2024	Radium 226 + Radium 228, total	0.363	pCi/L
101	Background	E004	02/20/2024	Selenium, total	0.00098 U	mg/L
101	Background	E004	02/20/2024	Specific Conductance @ 25C (field)	911	micromhos/cm
101	Background	E004	02/20/2024	Sulfate, total	100	mg/L
101	Background	E004	02/20/2024	Temperature	13.0	degrees C
101	Background	E004	02/20/2024	Thallium, total	0.00057 U	mg/L
101	Background	E004	02/20/2024	Total Dissolved Solids	640	mg/L
101	Background	E004	02/20/2024	Turbidity, field	22.7	NTU
103	Background	E004	02/20/2024	Antimony, total	0.0013 U	mg/L
103	Background	E004	02/20/2024	Arsenic, total	0.00180	mg/L
103	Background	E004	02/20/2024	Barium, total	0.0170	mg/L
103	Background	E004	02/20/2024	Beryllium, total	0.00053 U	mg/L
103	Background	E004	02/20/2024	Boron, total	0.290 J+	mg/L
103	Background	E004	02/20/2024	Cadmium, total	0.00017 U	mg/L
103	Background	E004	02/20/2024	Calcium, total	210	mg/L
103	Background	E004	02/20/2024	Chloride, total	4.80	mg/L
103	Background	E004	02/20/2024	Chromium, total	0.0011 U	mg/L
103	Background	E004	02/20/2024	Cobalt, total	0.00260	mg/L
103	Background	E004	02/20/2024	Dissolved Oxygen	5.80	mg/L
103	Background	E004	02/20/2024	Fluoride, total	0.230	mg/L
103	Background	E004	02/20/2024	Lead, total	0.0005 UJ	mg/L
103	Background	E004	02/20/2024	Lithium, total	0.0570	mg/L
103	Background	E004	02/20/2024	Mercury, total	0.000079 U	mg/L
103	Background	E004	02/20/2024	Molybdenum, total	0.00550	mg/L
103	Background	E004	02/20/2024	Oxidation Reduction Potential	85.2	mV
103	Background	E004	02/20/2024	pH (field)	7.0	SU
103	Background	E004	02/20/2024	Radium 226 + Radium 228, total	0.602	pCi/L
103	Background	E004	02/20/2024	Selenium, total	0.00098 U	mg/L
103	Background	E004	02/20/2024	Specific Conductance @ 25C (field)	1,732	micromhos/cm
103	Background	E004	02/20/2024	Sulfate, total	1,200	mg/L
103	Background	E004	02/20/2024	Temperature	13.1	degrees C
103	Background	E004	02/20/2024	Thallium, total	0.00057 U	mg/L
103	Background	E004	02/20/2024	Total Dissolved Solids	2,000	mg/L
103	Background	E004	02/20/2024	Turbidity, field	39.5	NTU
02	Compliance	E004	02/20/2024	Antimony, total	0.0013 J	mg/L
02	Compliance	E004	02/20/2024	Arsenic, total	0.0110	mg/L
02	Compliance	E004	02/20/2024	Barium, total	0.190	mg/L
02	Compliance	E004	02/20/2024	Beryllium, total	0.00053 U	mg/L
02	Compliance	E004	02/20/2024	Boron, total	0.320 J+	mg/L
02	Compliance	E004	02/20/2024	Cadmium, total	0.00017 U	mg/L
02	Compliance	E004	02/20/2024	Calcium, total	84.0	mg/L
02	Compliance	E004	02/20/2024	Chloride, total	47.0	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
02	Compliance	E004	02/20/2024	Chromium, total	0.0018 J	mg/L
02	Compliance	E004	02/20/2024	Cobalt, total	0.0004 U	mg/L
02	Compliance	E004	02/20/2024	Dissolved Oxygen	1.23	mg/L
02	Compliance	E004	02/20/2024	Fluoride, total	0.580	mg/L
02	Compliance	E004	02/20/2024	Lead, total	0.0005 UJ	mg/L
02	Compliance	E004	02/20/2024	Lithium, total	0.0025 J	mg/L
02	Compliance	E004	02/20/2024	Mercury, total	0.000079 U	mg/L
02	Compliance	E004	02/20/2024	Molybdenum, total	0.0025 U	mg/L
02	Compliance	E004	02/20/2024	Oxidation Reduction Potential	-186	mV
02	Compliance	E004	02/20/2024	pH (field)	7.8	SU
02	Compliance	E004	02/20/2024	Radium 226 + Radium 228, total	1.09	pCi/L
02	Compliance	E004	02/20/2024	Selenium, total	0.00098 U	mg/L
02	Compliance	E004	02/20/2024	Specific Conductance @ 25C (field)	846	micromhos/cm
02	Compliance	E004	02/20/2024	Sulfate, total	23.0	mg/L
02	Compliance	E004	02/20/2024	Temperature	13.3	degrees C
02	Compliance	E004	02/20/2024	Thallium, total	0.00057 U	mg/L
02	Compliance	E004	02/20/2024	Total Dissolved Solids	640	mg/L
02	Compliance	E004	02/20/2024	Turbidity, field	4.26	NTU
03R	Compliance	E004	02/20/2024	Antimony, total	0.0013 U	mg/L
03R	Compliance	E004	02/20/2024	Arsenic, total	0.00770	mg/L
03R	Compliance	E004	02/20/2024	Barium, total	0.310	mg/L
03R	Compliance	E004	02/20/2024	Beryllium, total	0.00053 U	mg/L
03R	Compliance	E004	02/20/2024	Boron, total	26.0	mg/L
03R	Compliance	E004	02/20/2024	Cadmium, total	0.000510	mg/L
03R	Compliance	E004	02/20/2024	Calcium, total	170	mg/L
03R	Compliance	E004	02/20/2024	Chloride, total	25.0	mg/L
03R	Compliance	E004	02/20/2024	Chromium, total	0.002 J	mg/L
03R	Compliance	E004	02/20/2024	Cobalt, total	0.00075 J	mg/L
03R	Compliance	E004	02/20/2024	Dissolved Oxygen	0.150	mg/L
03R	Compliance	E004	02/20/2024	Fluoride, total	0.460	mg/L
03R	Compliance	E004	02/20/2024	Lead, total	0.00100 J+	mg/L
03R	Compliance	E004	02/20/2024	Lithium, total	0.002 U	mg/L
03R	Compliance	E004	02/20/2024	Mercury, total	0.00011 J	mg/L
03R	Compliance	E004	02/20/2024	Molybdenum, total	0.330	mg/L
03R	Compliance	E004	02/20/2024	Oxidation Reduction Potential	-150	mV
03R	Compliance	E004	02/20/2024	pH (field)	7.4	SU
03R	Compliance	E004	02/20/2024	Radium 226 + Radium 228, total	1.31	pCi/L
03R	Compliance	E004	02/20/2024	Selenium, total	0.00098 U	mg/L
03R	Compliance	E004	02/20/2024	Specific Conductance @ 25C (field)	1,368	micromhos/cm
03R	Compliance	E004	02/20/2024	Sulfate, total	550	mg/L
03R	Compliance	E004	02/20/2024	Temperature	12.5	degrees C
03R	Compliance	E004	02/20/2024	Thallium, total	0.00057 U	mg/L
03R	Compliance	E004	02/20/2024	Total Dissolved Solids	1,300	mg/L
03R	Compliance	E004	02/20/2024	Turbidity, field	109	NTU
04	Compliance	E004	02/21/2024	Antimony, total	0.0013 U	mg/L
04	Compliance	E004	02/21/2024	Arsenic, total	0.0066 J	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024
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VERMILION POWER PLANT
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OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
04	Compliance	E004	02/21/2024	Barium, total	0.220	mg/L
04	Compliance	E004	02/21/2024	Beryllium, total	0.00053 U	mg/L
04	Compliance	E004	02/21/2024	Boron, total	7.50	mg/L
04	Compliance	E004	02/21/2024	Cadmium, total	0.00017 U	mg/L
04	Compliance	E004	02/21/2024	Calcium, total	72.0	mg/L
04	Compliance	E004	02/21/2024	Chloride, total	9.10	mg/L
04	Compliance	E004	02/21/2024	Chromium, total	0.0011 U	mg/L
04	Compliance	E004	02/21/2024	Cobalt, total	0.00056 J	mg/L
04	Compliance	E004	02/21/2024	Dissolved Oxygen	0.0900	mg/L
04	Compliance	E004	02/21/2024	Fluoride, total	0.300	mg/L
04	Compliance	E004	02/21/2024	Lead, total	0.00019 U	mg/L
04	Compliance	E004	02/21/2024	Lithium, total	0.0400	mg/L
04	Compliance	E004	02/21/2024	Mercury, total	0.000079 U	mg/L
04	Compliance	E004	02/21/2024	Molybdenum, total	0.0340	mg/L
04	Compliance	E004	02/21/2024	Oxidation Reduction Potential	-162	mV
04	Compliance	E004	02/21/2024	pH (field)	7.8	SU
04	Compliance	E004	02/21/2024	Radium 226 + Radium 228, total	0.812	pCi/L
04	Compliance	E004	02/21/2024	Selenium, total	0.00098 U	mg/L
04	Compliance	E004	02/21/2024	Specific Conductance @ 25C (field)	451	micromhos/cm
04	Compliance	E004	02/21/2024	Sulfate, total	36.0	mg/L
04	Compliance	E004	02/21/2024	Temperature	9.70	degrees C
04	Compliance	E004	02/21/2024	Thallium, total	0.00057 U	mg/L
04	Compliance	E004	02/21/2024	Total Dissolved Solids	350 J+	mg/L
04	Compliance	E004	02/21/2024	Turbidity, field	4.08	NTU
05	Compliance	E004	02/21/2024	Antimony, total	0.0013 U	mg/L
05	Compliance	E004	02/21/2024	Arsenic, total	0.0046 U	mg/L
05	Compliance	E004	02/21/2024	Barium, total	0.0230	mg/L
05	Compliance	E004	02/21/2024	Beryllium, total	0.00053 U	mg/L
05	Compliance	E004	02/21/2024	Boron, total	20.0	mg/L
05	Compliance	E004	02/21/2024	Cadmium, total	0.00017 U	mg/L
05	Compliance	E004	02/21/2024	Calcium, total	98.0	mg/L
05	Compliance	E004	02/21/2024	Chloride, total	6.50	mg/L
05	Compliance	E004	02/21/2024	Chromium, total	0.0011 U	mg/L
05	Compliance	E004	02/21/2024	Cobalt, total	0.00068 J	mg/L
05	Compliance	E004	02/21/2024	Dissolved Oxygen	0.0400	mg/L
05	Compliance	E004	02/21/2024	Fluoride, total	0.670	mg/L
05	Compliance	E004	02/21/2024	Lead, total	0.00019 U	mg/L
05	Compliance	E004	02/21/2024	Lithium, total	0.0800	mg/L
05	Compliance	E004	02/21/2024	Mercury, total	0.000079 U	mg/L
05	Compliance	E004	02/21/2024	Molybdenum, total	0.0380	mg/L
05	Compliance	E004	02/21/2024	Oxidation Reduction Potential	-6.90	mV
05	Compliance	E004	02/21/2024	pH (field)	7.6	SU
05	Compliance	E004	02/21/2024	Radium 226 + Radium 228, total	0.267	pCi/L
05	Compliance	E004	02/21/2024	Selenium, total	0.00098 U	mg/L
05	Compliance	E004	02/21/2024	Specific Conductance @ 25C (field)	553	micromhos/cm
05	Compliance	E004	02/21/2024	Sulfate, total	240	mg/L

TABLE 1.
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OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
05	Compliance	E004	02/21/2024	Temperature	11.0	degrees C
05	Compliance	E004	02/21/2024	Thallium, total	0.00057 U	mg/L
05	Compliance	E004	02/21/2024	Total Dissolved Solids	540	mg/L
05	Compliance	E004	02/21/2024	Turbidity, field	3.18	NTU
07R	Compliance	E004	02/21/2024	Antimony, total	0.0013 U	mg/L
07R	Compliance	E004	02/21/2024	Arsenic, total	0.00360	mg/L
07R	Compliance	E004	02/21/2024	Barium, total	0.0210	mg/L
07R	Compliance	E004	02/21/2024	Beryllium, total	0.00053 U	mg/L
07R	Compliance	E004	02/21/2024	Boron, total	47.0	mg/L
07R	Compliance	E004	02/21/2024	Cadmium, total	0.00017 U	mg/L
07R	Compliance	E004	02/21/2024	Calcium, total	760	mg/L
07R	Compliance	E004	02/21/2024	Chloride, total	4.10	mg/L
07R	Compliance	E004	02/21/2024	Chromium, total	0.0011 U	mg/L
07R	Compliance	E004	02/21/2024	Cobalt, total	0.00043 J	mg/L
07R	Compliance	E004	02/21/2024	Dissolved Oxygen	0.870	mg/L
07R	Compliance	E004	02/21/2024	Fluoride, total	0.091 J	mg/L
07R	Compliance	E004	02/21/2024	Lead, total	0.00019 U	mg/L
07R	Compliance	E004	02/21/2024	Lithium, total	0.560	mg/L
07R	Compliance	E004	02/21/2024	Mercury, total	0.000079 U	mg/L
07R	Compliance	E004	02/21/2024	Molybdenum, total	0.320	mg/L
07R	Compliance	E004	02/21/2024	Oxidation Reduction Potential	-141	mV
07R	Compliance	E004	02/21/2024	pH (field)	7.7	SU
07R	Compliance	E004	02/21/2024	Radium 226 + Radium 228, total	0.579	pCi/L
07R	Compliance	E004	02/21/2024	Selenium, total	0.00540	mg/L
07R	Compliance	E004	02/21/2024	Specific Conductance @ 25C (field)	2,551	micromhos/cm
07R	Compliance	E004	02/21/2024	Sulfate, total	2,000	mg/L
07R	Compliance	E004	02/21/2024	Temperature	12.6	degrees C
07R	Compliance	E004	02/21/2024	Thallium, total	0.00057 U	mg/L
07R	Compliance	E004	02/21/2024	Total Dissolved Solids	3,000	mg/L
07R	Compliance	E004	02/21/2024	Turbidity, field	132	NTU
08R	Compliance	E004	02/20/2024	Antimony, total	0.0013 U	mg/L
08R	Compliance	E004	02/20/2024	Arsenic, total	0.0280	mg/L
08R	Compliance	E004	02/20/2024	Barium, total	0.130	mg/L
08R	Compliance	E004	02/20/2024	Beryllium, total	0.00053 U	mg/L
08R	Compliance	E004	02/20/2024	Boron, total	37.0	mg/L
08R	Compliance	E004	02/20/2024	Cadmium, total	0.00017 U	mg/L
08R	Compliance	E004	02/20/2024	Calcium, total	280	mg/L
08R	Compliance	E004	02/20/2024	Chloride, total	6.10	mg/L
08R	Compliance	E004	02/20/2024	Chromium, total	0.0011 U	mg/L
08R	Compliance	E004	02/20/2024	Cobalt, total	0.00097 J	mg/L
08R	Compliance	E004	02/20/2024	Dissolved Oxygen	-0.0700	mg/L
08R	Compliance	E004	02/20/2024	Fluoride, total	0.056 J	mg/L
08R	Compliance	E004	02/20/2024	Lead, total	0.00019 U	mg/L
08R	Compliance	E004	02/20/2024	Lithium, total	0.350	mg/L
08R	Compliance	E004	02/20/2024	Mercury, total	0.00012 J	mg/L
08R	Compliance	E004	02/20/2024	Molybdenum, total	0.170	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
08R	Compliance	E004	02/20/2024	Oxidation Reduction Potential	-59.1	mV
08R	Compliance	E004	02/20/2024	pH (field)	7.1	SU
08R	Compliance	E004	02/20/2024	Radium 226 + Radium 228, total	0.862	pCi/L
08R	Compliance	E004	02/20/2024	Selenium, total	0.00098 U	mg/L
08R	Compliance	E004	02/20/2024	Specific Conductance @ 25C (field)	1,358	micromhos/cm
08R	Compliance	E004	02/20/2024	Sulfate, total	790	mg/L
08R	Compliance	E004	02/20/2024	Temperature	10.5	degrees C
08R	Compliance	E004	02/20/2024	Thallium, total	0.00057 U	mg/L
08R	Compliance	E004	02/20/2024	Total Dissolved Solids	1,300	mg/L
08R	Compliance	E004	02/20/2024	Turbidity, field	5.35	NTU
17	Compliance	E004	--	Antimony, total	--	mg/L
17	Compliance	E004	--	Arsenic, total	--	mg/L
17	Compliance	E004	--	Barium, total	--	mg/L
17	Compliance	E004	--	Beryllium, total	--	mg/L
17	Compliance	E004	--	Boron, total	--	mg/L
17	Compliance	E004	--	Cadmium, total	--	mg/L
17	Compliance	E004	--	Calcium, total	--	mg/L
17	Compliance	E004	--	Chloride, total	--	mg/L
17	Compliance	E004	--	Chromium, total	--	mg/L
17	Compliance	E004	--	Cobalt, total	--	mg/L
17	Compliance	E004	--	Dissolved Oxygen	--	mg/L
17	Compliance	E004	--	Fluoride, total	--	mg/L
17	Compliance	E004	--	Lead, total	--	mg/L
17	Compliance	E004	--	Lithium, total	--	mg/L
17	Compliance	E004	--	Mercury, total	--	mg/L
17	Compliance	E004	--	Molybdenum, total	--	mg/L
17	Compliance	E004	--	Oxidation Reduction Potential	--	mV
17	Compliance	E004	--	pH (field)	--	SU
17	Compliance	E004	--	Radium 226 + Radium 228, total	--	pCi/L
17	Compliance	E004	--	Selenium, total	--	mg/L
17	Compliance	E004	--	Specific Conductance @ 25C (field)	--	micromhos/cm
17	Compliance	E004	--	Sulfate, total	--	mg/L
17	Compliance	E004	--	Temperature	--	degrees C
17	Compliance	E004	--	Thallium, total	--	mg/L
17	Compliance	E004	--	Total Dissolved Solids	--	mg/L
17	Compliance	E004	--	Turbidity, field	--	NTU
20	Compliance	E004	02/20/2024	Antimony, total	0.0013 U	mg/L
20	Compliance	E004	02/20/2024	Arsenic, total	0.00058 J	mg/L
20	Compliance	E004	02/20/2024	Barium, total	0.0230	mg/L
20	Compliance	E004	02/20/2024	Beryllium, total	0.00053 U	mg/L
20	Compliance	E004	02/20/2024	Boron, total	1.70	mg/L
20	Compliance	E004	02/20/2024	Cadmium, total	0.00017 U	mg/L
20	Compliance	E004	02/20/2024	Calcium, total	110	mg/L
20	Compliance	E004	02/20/2024	Chloride, total	3.90	mg/L
20	Compliance	E004	02/20/2024	Chromium, total	0.0011 U	mg/L
20	Compliance	E004	02/20/2024	Cobalt, total	0.00069 J	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
20	Compliance	E004	02/20/2024	Dissolved Oxygen	1.12	mg/L
20	Compliance	E004	02/20/2024	Fluoride, total	0.079 J	mg/L
20	Compliance	E004	02/20/2024	Lead, total	0.00019 U	mg/L
20	Compliance	E004	02/20/2024	Lithium, total	0.0210	mg/L
20	Compliance	E004	02/20/2024	Mercury, total	0.000079 U	mg/L
20	Compliance	E004	02/20/2024	Molybdenum, total	0.0025 U	mg/L
20	Compliance	E004	02/20/2024	Oxidation Reduction Potential	-40.0	mV
20	Compliance	E004	02/20/2024	pH (field)	7.1	SU
20	Compliance	E004	02/20/2024	Radium 226 + Radium 228, total	0.41	pCi/L
20	Compliance	E004	02/20/2024	Selenium, total	0.00098 U	mg/L
20	Compliance	E004	02/20/2024	Specific Conductance @ 25C (field)	554	micromhos/cm
20	Compliance	E004	02/20/2024	Sulfate, total	88.0	mg/L
20	Compliance	E004	02/20/2024	Temperature	10.5	degrees C
20	Compliance	E004	02/20/2024	Thallium, total	0.00057 U	mg/L
20	Compliance	E004	02/20/2024	Total Dissolved Solids	530	mg/L
20	Compliance	E004	02/20/2024	Turbidity, field	3.99	NTU
34	Compliance	E004	02/20/2024	Antimony, total	0.0013 U	mg/L
34	Compliance	E004	02/20/2024	Arsenic, total	0.0270	mg/L
34	Compliance	E004	02/20/2024	Barium, total	0.160	mg/L
34	Compliance	E004	02/20/2024	Beryllium, total	0.00053 U	mg/L
34	Compliance	E004	02/20/2024	Boron, total	0.500 J+	mg/L
34	Compliance	E004	02/20/2024	Cadmium, total	0.00017 U	mg/L
34	Compliance	E004	02/20/2024	Calcium, total	65.0	mg/L
34	Compliance	E004	02/20/2024	Chloride, total	34.0	mg/L
34	Compliance	E004	02/20/2024	Chromium, total	0.0036 J	mg/L
34	Compliance	E004	02/20/2024	Cobalt, total	0.00087 J	mg/L
34	Compliance	E004	02/20/2024	Dissolved Oxygen	0.110	mg/L
34	Compliance	E004	02/20/2024	Fluoride, total	0.640	mg/L
34	Compliance	E004	02/20/2024	Lead, total	0.00180 J+	mg/L
34	Compliance	E004	02/20/2024	Lithium, total	0.0037 J	mg/L
34	Compliance	E004	02/20/2024	Mercury, total	0.000079 U	mg/L
34	Compliance	E004	02/20/2024	Molybdenum, total	0.0025 U	mg/L
34	Compliance	E004	02/20/2024	Oxidation Reduction Potential	78.7	mV
34	Compliance	E004	02/20/2024	pH (field)	7.2	SU
34	Compliance	E004	02/20/2024	Radium 226 + Radium 228, total	1.84	pCi/L
34	Compliance	E004	02/20/2024	Selenium, total	0.00098 U	mg/L
34	Compliance	E004	02/20/2024	Specific Conductance @ 25C (field)	829	micromhos/cm
34	Compliance	E004	02/20/2024	Sulfate, total	1 UJ	mg/L
34	Compliance	E004	02/20/2024	Temperature	11.5	degrees C
34	Compliance	E004	02/20/2024	Thallium, total	0.00057 U	mg/L
34	Compliance	E004	02/20/2024	Total Dissolved Solids	530	mg/L
34	Compliance	E004	02/20/2024	Turbidity, field	241	NTU
36	Compliance	E004	02/20/2024	Antimony, total	0.0013 U	mg/L
36	Compliance	E004	02/20/2024	Arsenic, total	0.00360 J	mg/L
36	Compliance	E004	02/20/2024	Barium, total	0.0920	mg/L
36	Compliance	E004	02/20/2024	Beryllium, total	0.00053 U	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
36	Compliance	E004	02/20/2024	Boron, total	17.0	mg/L
36	Compliance	E004	02/20/2024	Cadmium, total	0.00017 U	mg/L
36	Compliance	E004	02/20/2024	Calcium, total	410	mg/L
36	Compliance	E004	02/20/2024	Chloride, total	13.0	mg/L
36	Compliance	E004	02/20/2024	Chromium, total	0.0013 J	mg/L
36	Compliance	E004	02/20/2024	Cobalt, total	0.00056 J	mg/L
36	Compliance	E004	02/20/2024	Dissolved Oxygen	0.220	mg/L
36	Compliance	E004	02/20/2024	Fluoride, total	0.240	mg/L
36	Compliance	E004	02/20/2024	Lead, total	0.0005 UJ	mg/L
36	Compliance	E004	02/20/2024	Lithium, total	0.250	mg/L
36	Compliance	E004	02/20/2024	Mercury, total	0.000079 U	mg/L
36	Compliance	E004	02/20/2024	Molybdenum, total	0.230	mg/L
36	Compliance	E004	02/20/2024	Oxidation Reduction Potential	-119	mV
36	Compliance	E004	02/20/2024	pH (field)	7.3	SU
36	Compliance	E004	02/20/2024	Radium 226 + Radium 228, total	0.466	pCi/L
36	Compliance	E004	02/20/2024	Selenium, total	0.00098 U	mg/L
36	Compliance	E004	02/20/2024	Specific Conductance @ 25C (field)	1,761	micromhos/cm
36	Compliance	E004	02/20/2024	Sulfate, total	1,100	mg/L
36	Compliance	E004	02/20/2024	Temperature	12.1	degrees C
36	Compliance	E004	02/20/2024	Thallium, total	0.00057 U	mg/L
36	Compliance	E004	02/20/2024	Total Dissolved Solids	1,900	mg/L
36	Compliance	E004	02/20/2024	Turbidity, field	13	NTU
37	Compliance	E004	02/20/2024	Antimony, total	0.0013 U	mg/L
37	Compliance	E004	02/20/2024	Arsenic, total	0.0420	mg/L
37	Compliance	E004	02/20/2024	Barium, total	0.370	mg/L
37	Compliance	E004	02/20/2024	Beryllium, total	0.00053 U	mg/L
37	Compliance	E004	02/20/2024	Boron, total	2.00	mg/L
37	Compliance	E004	02/20/2024	Cadmium, total	0.00017 U	mg/L
37	Compliance	E004	02/20/2024	Calcium, total	130	mg/L
37	Compliance	E004	02/20/2024	Chloride, total	44.0	mg/L
37	Compliance	E004	02/20/2024	Chromium, total	0.017 J	mg/L
37	Compliance	E004	02/20/2024	Cobalt, total	0.00083 J	mg/L
37	Compliance	E004	02/20/2024	Dissolved Oxygen	0.250	mg/L
37	Compliance	E004	02/20/2024	Fluoride, total	0.550	mg/L
37	Compliance	E004	02/20/2024	Lead, total	0.00170 J+	mg/L
37	Compliance	E004	02/20/2024	Lithium, total	0.002 U	mg/L
37	Compliance	E004	02/20/2024	Mercury, total	0.000079 U	mg/L
37	Compliance	E004	02/20/2024	Molybdenum, total	0.0025 U	mg/L
37	Compliance	E004	02/20/2024	Oxidation Reduction Potential	-172	mV
37	Compliance	E004	02/20/2024	pH (field)	7.1	SU
37	Compliance	E004	02/20/2024	Radium 226 + Radium 228, total	1.84	pCi/L
37	Compliance	E004	02/20/2024	Selenium, total	0.00098 U	mg/L
37	Compliance	E004	02/20/2024	Specific Conductance @ 25C (field)	1,238	micromhos/cm
37	Compliance	E004	02/20/2024	Sulfate, total	310	mg/L
37	Compliance	E004	02/20/2024	Temperature	12.6	degrees C
37	Compliance	E004	02/20/2024	Thallium, total	0.00057 U	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
37	Compliance	E004	02/20/2024	Total Dissolved Solids	930	mg/L
37	Compliance	E004	02/20/2024	Turbidity, field	98.5	NTU
38	Compliance	E004	02/20/2024	Antimony, total	0.0013 U	mg/L
38	Compliance	E004	02/20/2024	Arsenic, total	0.0270	mg/L
38	Compliance	E004	02/20/2024	Barium, total	0.190	mg/L
38	Compliance	E004	02/20/2024	Beryllium, total	0.00053 U	mg/L
38	Compliance	E004	02/20/2024	Boron, total	0.450 J+	mg/L
38	Compliance	E004	02/20/2024	Cadmium, total	0.00017 U	mg/L
38	Compliance	E004	02/20/2024	Calcium, total	13.0	mg/L
38	Compliance	E004	02/20/2024	Chloride, total	17.0	mg/L
38	Compliance	E004	02/20/2024	Chromium, total	0.0032 J	mg/L
38	Compliance	E004	02/20/2024	Cobalt, total	0.00061 J	mg/L
38	Compliance	E004	02/20/2024	Dissolved Oxygen	0.0300	mg/L
38	Compliance	E004	02/20/2024	Fluoride, total	0.360	mg/L
38	Compliance	E004	02/20/2024	Lead, total	0.00180 J+	mg/L
38	Compliance	E004	02/20/2024	Lithium, total	0.002 J	mg/L
38	Compliance	E004	02/20/2024	Mercury, total	0.000079 U	mg/L
38	Compliance	E004	02/20/2024	Molybdenum, total	0.0025 U	mg/L
38	Compliance	E004	02/20/2024	Oxidation Reduction Potential	-151	mV
38	Compliance	E004	02/20/2024	pH (field)	7.1	SU
38	Compliance	E004	02/20/2024	Radium 226 + Radium 228, total	1.65	pCi/L
38	Compliance	E004	02/20/2024	Selenium, total	0.00098 U	mg/L
38	Compliance	E004	02/20/2024	Specific Conductance @ 25C (field)	753	micromhos/cm
38	Compliance	E004	02/20/2024	Sulfate, total	1 UJ	mg/L
38	Compliance	E004	02/20/2024	Temperature	11.6	degrees C
38	Compliance	E004	02/20/2024	Thallium, total	0.00057 U	mg/L
38	Compliance	E004	02/20/2024	Total Dissolved Solids	570	mg/L
38	Compliance	E004	02/20/2024	Turbidity, field	44.4	NTU
40	Compliance	E004	02/20/2024	Antimony, total	0.0013 U	mg/L
40	Compliance	E004	02/20/2024	Arsenic, total	0.0200	mg/L
40	Compliance	E004	02/20/2024	Barium, total	0.0280	mg/L
40	Compliance	E004	02/20/2024	Beryllium, total	0.00053 U	mg/L
40	Compliance	E004	02/20/2024	Boron, total	24.0 J	mg/L
40	Compliance	E004	02/20/2024	Cadmium, total	0.00017 U	mg/L
40	Compliance	E004	02/20/2024	Calcium, total	640	mg/L
40	Compliance	E004	02/20/2024	Chloride, total	9.10	mg/L
40	Compliance	E004	02/20/2024	Chromium, total	0.0021 J	mg/L
40	Compliance	E004	02/20/2024	Cobalt, total	0.00750	mg/L
40	Compliance	E004	02/20/2024	Dissolved Oxygen	0.200	mg/L
40	Compliance	E004	02/20/2024	Fluoride, total	0.056 U	mg/L
40	Compliance	E004	02/20/2024	Lead, total	0.00019 U	mg/L
40	Compliance	E004	02/20/2024	Lithium, total	0.780	mg/L
40	Compliance	E004	02/20/2024	Mercury, total	0.000079 U	mg/L
40	Compliance	E004	02/20/2024	Molybdenum, total	0.0560	mg/L
40	Compliance	E004	02/20/2024	Oxidation Reduction Potential	-124	mV
40	Compliance	E004	02/20/2024	pH (field)	6.5	SU

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
40	Compliance	E004	02/20/2024	Radium 226 + Radium 228, total	1.04	pCi/L
40	Compliance	E004	02/20/2024	Selenium, total	0.00098 U	mg/L
40	Compliance	E004	02/20/2024	Specific Conductance @ 25C (field)	3,787	micromhos/cm
40	Compliance	E004	02/20/2024	Sulfate, total	3,300	mg/L
40	Compliance	E004	02/20/2024	Temperature	12.5	degrees C
40	Compliance	E004	02/20/2024	Thallium, total	0.00057 U	mg/L
40	Compliance	E004	02/20/2024	Total Dissolved Solids	5,100	mg/L
40	Compliance	E004	02/20/2024	Turbidity, field	216	NTU
41	Compliance	E004	02/21/2024	Antimony, total	0.0013 U	mg/L
41	Compliance	E004	02/21/2024	Arsenic, total	0.0130	mg/L
41	Compliance	E004	02/21/2024	Barium, total	0.260	mg/L
41	Compliance	E004	02/21/2024	Beryllium, total	0.00053 U	mg/L
41	Compliance	E004	02/21/2024	Boron, total	3.50	mg/L
41	Compliance	E004	02/21/2024	Cadmium, total	0.00017 U	mg/L
41	Compliance	E004	02/21/2024	Calcium, total	92.0	mg/L
41	Compliance	E004	02/21/2024	Chloride, total	49.0	mg/L
41	Compliance	E004	02/21/2024	Chromium, total	0.0012 J	mg/L
41	Compliance	E004	02/21/2024	Cobalt, total	0.0004 U	mg/L
41	Compliance	E004	02/21/2024	Dissolved Oxygen	-0.240	mg/L
41	Compliance	E004	02/21/2024	Fluoride, total	0.410	mg/L
41	Compliance	E004	02/21/2024	Lead, total	0.0005 UJ	mg/L
41	Compliance	E004	02/21/2024	Lithium, total	0.002 U	mg/L
41	Compliance	E004	02/21/2024	Mercury, total	0.000079 U	mg/L
41	Compliance	E004	02/21/2024	Molybdenum, total	0.0025 U	mg/L
41	Compliance	E004	02/21/2024	Oxidation Reduction Potential	-156	mV
41	Compliance	E004	02/21/2024	pH (field)	7.2	SU
41	Compliance	E004	02/21/2024	Radium 226 + Radium 228, total	1.12	pCi/L
41	Compliance	E004	02/21/2024	Selenium, total	0.00098 U	mg/L
41	Compliance	E004	02/21/2024	Specific Conductance @ 25C (field)	1,039	micromhos/cm
41	Compliance	E004	02/21/2024	Sulfate, total	1 UJ	mg/L
41	Compliance	E004	02/21/2024	Temperature	12.6	degrees C
41	Compliance	E004	02/21/2024	Thallium, total	0.00057 U	mg/L
41	Compliance	E004	02/21/2024	Total Dissolved Solids	650	mg/L
41	Compliance	E004	02/21/2024	Turbidity, field	27.1	NTU

Notes:
– = no data available
C = Celsius
cm = centimeter
mg/L = milligrams per liter
mV = millivolts
NTU = Nephelometric Turbidity Units
pCi/L = picocuries per liter
SU = Standard Units
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+ = The result is an estimated quantity, but the result may be biased high.
U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.
UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
21	Background	E005	06/06/2024	Antimony, total	0.0013 U	mg/L
21	Background	E005	06/06/2024	Arsenic, total	0.0470	mg/L
21	Background	E005	06/06/2024	Barium, total	0.130	mg/L
21	Background	E005	06/06/2024	Beryllium, total	0.00053 U	mg/L
21	Background	E005	06/06/2024	Boron, total	0.850 J+	mg/L
21	Background	E005	06/06/2024	Cadmium, total	0.00017 U	mg/L
21	Background	E005	06/06/2024	Calcium, total	85.0	mg/L
21	Background	E005	06/06/2024	Chloride, total	2.40	mg/L
21	Background	E005	06/06/2024	Chromium, total	0.0011 U	mg/L
21	Background	E005	06/06/2024	Cobalt, total	0.0004 U	mg/L
21	Background	E005	06/06/2024	Dissolved Oxygen	0.310	mg/L
21	Background	E005	06/06/2024	Fluoride, total	0.920	mg/L
21	Background	E005	06/06/2024	Lead, total	0.00019 U	mg/L
21	Background	E005	06/06/2024	Lithium, total	0.0026 J	mg/L
21	Background	E005	06/06/2024	Mercury, total	0.000076 U	mg/L
21	Background	E005	06/06/2024	Molybdenum, total	0.003 J	mg/L
21	Background	E005	06/06/2024	Oxidation Reduction Potential	35.0	mV
21	Background	E005	06/06/2024	pH (field)	8.1	SU
21	Background	E005	06/06/2024	Radium 226 + Radium 228, total	0.902	pCi/L
21	Background	E005	06/06/2024	Selenium, total	0.00098 U	mg/L
21	Background	E005	06/06/2024	Specific Conductance @ 25C (field)	815	micromhos/cm
21	Background	E005	06/06/2024	Sulfate, total	82.0	mg/L
21	Background	E005	06/06/2024	Temperature	14.9	degrees C
21	Background	E005	06/06/2024	Thallium, total	0.00057 U	mg/L
21	Background	E005	06/06/2024	Total Dissolved Solids	660	mg/L
21	Background	E005	06/06/2024	Turbidity, field	3.10	NTU
42	Background	E005	06/06/2024	Antimony, total	0.0013 U	mg/L
42	Background	E005	06/06/2024	Arsenic, total	0.0200	mg/L
42	Background	E005	06/06/2024	Barium, total	0.160	mg/L
42	Background	E005	06/06/2024	Beryllium, total	0.00053 U	mg/L
42	Background	E005	06/06/2024	Boron, total	0.700 J+	mg/L
42	Background	E005	06/06/2024	Cadmium, total	0.00017 U	mg/L
42	Background	E005	06/06/2024	Calcium, total	96.0	mg/L
42	Background	E005	06/06/2024	Chloride, total	18.0	mg/L
42	Background	E005	06/06/2024	Chromium, total	0.0011 U	mg/L
42	Background	E005	06/06/2024	Cobalt, total	0.0004 U	mg/L
42	Background	E005	06/06/2024	Dissolved Oxygen	0.980	mg/L
42	Background	E005	06/06/2024	Fluoride, total	0.590	mg/L
42	Background	E005	06/06/2024	Lead, total	0.00019 U	mg/L
42	Background	E005	06/06/2024	Lithium, total	0.003 J	mg/L
42	Background	E005	06/06/2024	Mercury, total	0.000076 U	mg/L
42	Background	E005	06/06/2024	Molybdenum, total	0.0025 U	mg/L
42	Background	E005	06/06/2024	Oxidation Reduction Potential	42.0	mV
42	Background	E005	06/06/2024	pH (field)	7.8	SU
42	Background	E005	06/06/2024	Radium 226 + Radium 228, total	1.36	pCi/L
42	Background	E005	06/06/2024	Selenium, total	0.00098 U	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
42	Background	E005	06/06/2024	Specific Conductance @ 25C (field)	1,110	micromhos/cm
42	Background	E005	06/06/2024	Sulfate, total	71.0 J	mg/L
42	Background	E005	06/06/2024	Temperature	13.1	degrees C
42	Background	E005	06/06/2024	Thallium, total	0.00057 U	mg/L
42	Background	E005	06/06/2024	Total Dissolved Solids	570	mg/L
42	Background	E005	06/06/2024	Turbidity, field	3.10	NTU
43	Background	E005	05/09/2024	Antimony, total	0.0013 U	mg/L
43	Background	E005	05/09/2024	Arsenic, total	0.00950	mg/L
43	Background	E005	05/09/2024	Barium, total	0.400	mg/L
43	Background	E005	05/09/2024	Beryllium, total	0.00053 U	mg/L
43	Background	E005	05/09/2024	Boron, total	1.00	mg/L
43	Background	E005	05/09/2024	Cadmium, total	0.00017 U	mg/L
43	Background	E005	05/09/2024	Calcium, total	96.0	mg/L
43	Background	E005	05/09/2024	Chloride, total	61.0	mg/L
43	Background	E005	05/09/2024	Chromium, total	0.0011 U	mg/L
43	Background	E005	05/09/2024	Cobalt, total	0.0004 U	mg/L
43	Background	E005	05/09/2024	Dissolved Oxygen	2.27	mg/L
43	Background	E005	05/09/2024	Fluoride, total	0.510	mg/L
43	Background	E005	05/09/2024	Lead, total	0.0005 UJ	mg/L
43	Background	E005	05/09/2024	Lithium, total	0.0120	mg/L
43	Background	E005	05/09/2024	Mercury, total	0.000076 U	mg/L
43	Background	E005	05/09/2024	Molybdenum, total	0.0025 U	mg/L
43	Background	E005	05/09/2024	Oxidation Reduction Potential	-77.9	mV
43	Background	E005	05/09/2024	pH (field)	7.2	SU
43	Background	E005	05/09/2024	Radium 226 + Radium 228, total	0.747	pCi/L
43	Background	E005	05/09/2024	Selenium, total	0.00098 U	mg/L
43	Background	E005	05/09/2024	Specific Conductance @ 25C (field)	1,267	micromhos/cm
43	Background	E005	05/09/2024	Sulfate, total	120	mg/L
43	Background	E005	05/09/2024	Temperature	11.8	degrees C
43	Background	E005	05/09/2024	Thallium, total	0.00057 U	mg/L
43	Background	E005	05/09/2024	Total Dissolved Solids	790	mg/L
43	Background	E005	05/09/2024	Turbidity, field	21	NTU
101	Background	E005	06/06/2024	Antimony, total	0.0013 U	mg/L
101	Background	E005	06/06/2024	Arsenic, total	0.0470	mg/L
101	Background	E005	06/06/2024	Barium, total	0.110	mg/L
101	Background	E005	06/06/2024	Beryllium, total	0.00053 U	mg/L
101	Background	E005	06/06/2024	Boron, total	2.10	mg/L
101	Background	E005	06/06/2024	Cadmium, total	0.00017 U	mg/L
101	Background	E005	06/06/2024	Calcium, total	88.0	mg/L
101	Background	E005	06/06/2024	Chloride, total	32.0	mg/L
101	Background	E005	06/06/2024	Chromium, total	0.0011 U	mg/L
101	Background	E005	06/06/2024	Cobalt, total	0.0004 U	mg/L
101	Background	E005	06/06/2024	Dissolved Oxygen	0.550	mg/L
101	Background	E005	06/06/2024	Fluoride, total	0.670	mg/L
101	Background	E005	06/06/2024	Lead, total	0.00019 U	mg/L
101	Background	E005	06/06/2024	Lithium, total	0.0300	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
101	Background	E005	06/06/2024	Mercury, total	0.000076 U	mg/L
101	Background	E005	06/06/2024	Molybdenum, total	0.0025 U	mg/L
101	Background	E005	06/06/2024	Oxidation Reduction Potential	59.0	mV
101	Background	E005	06/06/2024	pH (field)	8.2	SU
101	Background	E005	06/06/2024	Radium 226 + Radium 228, total	0.769	pCi/L
101	Background	E005	06/06/2024	Selenium, total	0.00098 U	mg/L
101	Background	E005	06/06/2024	Specific Conductance @ 25C (field)	1,340	micromhos/cm
101	Background	E005	06/06/2024	Sulfate, total	190	mg/L
101	Background	E005	06/06/2024	Temperature	17.2	degrees C
101	Background	E005	06/06/2024	Thallium, total	0.00057 U	mg/L
101	Background	E005	06/06/2024	Total Dissolved Solids	810	mg/L
101	Background	E005	06/06/2024	Turbidity, field	7.80	NTU
103	Background	E005	05/09/2024	Antimony, total	0.0013 U	mg/L
103	Background	E005	05/09/2024	Arsenic, total	0.00130	mg/L
103	Background	E005	05/09/2024	Barium, total	0.0150	mg/L
103	Background	E005	05/09/2024	Beryllium, total	0.00053 U	mg/L
103	Background	E005	05/09/2024	Boron, total	0.290 J+	mg/L
103	Background	E005	05/09/2024	Cadmium, total	0.00017 U	mg/L
103	Background	E005	05/09/2024	Calcium, total	210	mg/L
103	Background	E005	05/09/2024	Chloride, total	5.40	mg/L
103	Background	E005	05/09/2024	Chromium, total	0.0011 U	mg/L
103	Background	E005	05/09/2024	Cobalt, total	0.00320	mg/L
103	Background	E005	05/09/2024	Dissolved Oxygen	3.96	mg/L
103	Background	E005	05/09/2024	Fluoride, total	0.260	mg/L
103	Background	E005	05/09/2024	Lead, total	0.00019 U	mg/L
103	Background	E005	05/09/2024	Lithium, total	0.0650	mg/L
103	Background	E005	05/09/2024	Mercury, total	0.000076 U	mg/L
103	Background	E005	05/09/2024	Molybdenum, total	0.0041 J	mg/L
103	Background	E005	05/09/2024	Oxidation Reduction Potential	148	mV
103	Background	E005	05/09/2024	pH (field)	7.0	SU
103	Background	E005	05/09/2024	Radium 226 + Radium 228, total	0.0499	pCi/L
103	Background	E005	05/09/2024	Selenium, total	0.00098 U	mg/L
103	Background	E005	05/09/2024	Specific Conductance @ 25C (field)	2,000	micromhos/cm
103	Background	E005	05/09/2024	Sulfate, total	1,000	mg/L
103	Background	E005	05/09/2024	Temperature	13.3	degrees C
103	Background	E005	05/09/2024	Thallium, total	0.00057 U	mg/L
103	Background	E005	05/09/2024	Total Dissolved Solids	1,900	mg/L
103	Background	E005	05/09/2024	Turbidity, field	19.0	NTU
02	Compliance	E005	05/08/2024	Antimony, total	0.0013 U	mg/L
02	Compliance	E005	05/08/2024	Arsenic, total	0.00730	mg/L
02	Compliance	E005	05/08/2024	Barium, total	0.240	mg/L
02	Compliance	E005	05/08/2024	Beryllium, total	0.00053 U	mg/L
02	Compliance	E005	05/08/2024	Boron, total	0.350	mg/L
02	Compliance	E005	05/08/2024	Cadmium, total	0.00017 U	mg/L
02	Compliance	E005	05/08/2024	Calcium, total	110	mg/L
02	Compliance	E005	05/08/2024	Chloride, total	4.90	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
02	Compliance	E005	05/08/2024	Chromium, total	0.0011 U	mg/L
02	Compliance	E005	05/08/2024	Cobalt, total	0.0004 U	mg/L
02	Compliance	E005	05/08/2024	Dissolved Oxygen	2.09	mg/L
02	Compliance	E005	05/08/2024	Fluoride, total	0.610	mg/L
02	Compliance	E005	05/08/2024	Lead, total	0.00024 J	mg/L
02	Compliance	E005	05/08/2024	Lithium, total	0.0031 J	mg/L
02	Compliance	E005	05/08/2024	Mercury, total	0.000076 U	mg/L
02	Compliance	E005	05/08/2024	Molybdenum, total	0.0025 U	mg/L
02	Compliance	E005	05/08/2024	Oxidation Reduction Potential	-63.9	mV
02	Compliance	E005	05/08/2024	pH (field)	7.8	SU
02	Compliance	E005	05/08/2024	Radium 226 + Radium 228, total	0.625	pCi/L
02	Compliance	E005	05/08/2024	Selenium, total	0.00098 U	mg/L
02	Compliance	E005	05/08/2024	Specific Conductance @ 25C (field)	1,069	micromhos/cm
02	Compliance	E005	05/08/2024	Sulfate, total	18.0	mg/L
02	Compliance	E005	05/08/2024	Temperature	14.5	degrees C
02	Compliance	E005	05/08/2024	Thallium, total	0.00057 U	mg/L
02	Compliance	E005	05/08/2024	Total Dissolved Solids	670	mg/L
02	Compliance	E005	05/08/2024	Turbidity, field	9.89	NTU
03R	Compliance	E005	06/06/2024	Antimony, total	0.0013 U	mg/L
03R	Compliance	E005	06/06/2024	Arsenic, total	0.00460	mg/L
03R	Compliance	E005	06/06/2024	Barium, total	0.330	mg/L
03R	Compliance	E005	06/06/2024	Beryllium, total	0.00053 U	mg/L
03R	Compliance	E005	06/06/2024	Boron, total	29.0	mg/L
03R	Compliance	E005	06/06/2024	Cadmium, total	0.00017 U	mg/L
03R	Compliance	E005	06/06/2024	Calcium, total	180	mg/L
03R	Compliance	E005	06/06/2024	Chloride, total	26.0	mg/L
03R	Compliance	E005	06/06/2024	Chromium, total	0.0011 U	mg/L
03R	Compliance	E005	06/06/2024	Cobalt, total	0.0004 U	mg/L
03R	Compliance	E005	06/06/2024	Dissolved Oxygen	6.89	mg/L
03R	Compliance	E005	06/06/2024	Fluoride, total	0.430	mg/L
03R	Compliance	E005	06/06/2024	Lead, total	0.00046 J	mg/L
03R	Compliance	E005	06/06/2024	Lithium, total	0.0046 J	mg/L
03R	Compliance	E005	06/06/2024	Mercury, total	0.000076 U	mg/L
03R	Compliance	E005	06/06/2024	Molybdenum, total	0.390	mg/L
03R	Compliance	E005	06/06/2024	Oxidation Reduction Potential	167	mV
03R	Compliance	E005	06/06/2024	pH (field)	7.0	SU
03R	Compliance	E005	06/06/2024	Radium 226 + Radium 228, total	2.06	pCi/L
03R	Compliance	E005	06/06/2024	Selenium, total	0.00098 U	mg/L
03R	Compliance	E005	06/06/2024	Specific Conductance @ 25C (field)	1,840	micromhos/cm
03R	Compliance	E005	06/06/2024	Sulfate, total	640	mg/L
03R	Compliance	E005	06/06/2024	Temperature	22.1	degrees C
03R	Compliance	E005	06/06/2024	Thallium, total	0.00057 U	mg/L
03R	Compliance	E005	06/06/2024	Total Dissolved Solids	1,400	mg/L
03R	Compliance	E005	06/06/2024	Turbidity, field	77.2	NTU
04	Compliance	E005	05/08/2024	Antimony, total	0.0013 U	mg/L
04	Compliance	E005	05/08/2024	Arsenic, total	0.00600	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
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VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
04	Compliance	E005	05/08/2024	Barium, total	0.200	mg/L
04	Compliance	E005	05/08/2024	Beryllium, total	0.00053 U	mg/L
04	Compliance	E005	05/08/2024	Boron, total	8.00	mg/L
04	Compliance	E005	05/08/2024	Cadmium, total	0.00017 U	mg/L
04	Compliance	E005	05/08/2024	Calcium, total	63.0	mg/L
04	Compliance	E005	05/08/2024	Chloride, total	9.50	mg/L
04	Compliance	E005	05/08/2024	Chromium, total	0.0011 U	mg/L
04	Compliance	E005	05/08/2024	Cobalt, total	0.00047 J	mg/L
04	Compliance	E005	05/08/2024	Dissolved Oxygen	0.200	mg/L
04	Compliance	E005	05/08/2024	Fluoride, total	0.350	mg/L
04	Compliance	E005	05/08/2024	Lead, total	0.00019 U	mg/L
04	Compliance	E005	05/08/2024	Lithium, total	0.0440	mg/L
04	Compliance	E005	05/08/2024	Mercury, total	0.000076 U	mg/L
04	Compliance	E005	05/08/2024	Molybdenum, total	0.0370	mg/L
04	Compliance	E005	05/08/2024	Oxidation Reduction Potential	-140	mV
04	Compliance	E005	05/08/2024	pH (field)	7.7	SU
04	Compliance	E005	05/08/2024	Radium 226 + Radium 228, total	1.23	pCi/L
04	Compliance	E005	05/08/2024	Selenium, total	0.00098 U	mg/L
04	Compliance	E005	05/08/2024	Specific Conductance @ 25C (field)	545	micromhos/cm
04	Compliance	E005	05/08/2024	Sulfate, total	25.0	mg/L
04	Compliance	E005	05/08/2024	Temperature	12.6	degrees C
04	Compliance	E005	05/08/2024	Thallium, total	0.00057 U	mg/L
04	Compliance	E005	05/08/2024	Total Dissolved Solids	350	mg/L
04	Compliance	E005	05/08/2024	Turbidity, field	3.62	NTU
05	Compliance	E005	06/06/2024	Antimony, total	0.0013 U	mg/L
05	Compliance	E005	06/06/2024	Arsenic, total	0.00029 J	mg/L
05	Compliance	E005	06/06/2024	Barium, total	0.0280	mg/L
05	Compliance	E005	06/06/2024	Beryllium, total	0.00053 U	mg/L
05	Compliance	E005	06/06/2024	Boron, total	17.0	mg/L
05	Compliance	E005	06/06/2024	Cadmium, total	0.00017 U	mg/L
05	Compliance	E005	06/06/2024	Calcium, total	120	mg/L
05	Compliance	E005	06/06/2024	Chloride, total	8.00	mg/L
05	Compliance	E005	06/06/2024	Chromium, total	0.0011 U	mg/L
05	Compliance	E005	06/06/2024	Cobalt, total	0.00073 J	mg/L
05	Compliance	E005	06/06/2024	Dissolved Oxygen	4.12	mg/L
05	Compliance	E005	06/06/2024	Fluoride, total	0.610	mg/L
05	Compliance	E005	06/06/2024	Lead, total	0.00019 J	mg/L
05	Compliance	E005	06/06/2024	Lithium, total	0.0960	mg/L
05	Compliance	E005	06/06/2024	Mercury, total	0.000076 U	mg/L
05	Compliance	E005	06/06/2024	Molybdenum, total	0.0420	mg/L
05	Compliance	E005	06/06/2024	Oxidation Reduction Potential	187	mV
05	Compliance	E005	06/06/2024	pH (field)	7.8	SU
05	Compliance	E005	06/06/2024	Radium 226 + Radium 228, total	0.133	pCi/L
05	Compliance	E005	06/06/2024	Selenium, total	0.00098 U	mg/L
05	Compliance	E005	06/06/2024	Specific Conductance @ 25C (field)	851	micromhos/cm
05	Compliance	E005	06/06/2024	Sulfate, total	250	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
05	Compliance	E005	06/06/2024	Temperature	14	degrees C
05	Compliance	E005	06/06/2024	Thallium, total	0.00057 U	mg/L
05	Compliance	E005	06/06/2024	Total Dissolved Solids	560	mg/L
05	Compliance	E005	06/06/2024	Turbidity, field	39.1	NTU
07R	Compliance	E005	05/07/2024	Antimony, total	0.0013 U	mg/L
07R	Compliance	E005	05/07/2024	Arsenic, total	0.00110	mg/L
07R	Compliance	E005	05/07/2024	Barium, total	0.0160	mg/L
07R	Compliance	E005	05/07/2024	Beryllium, total	0.00053 U	mg/L
07R	Compliance	E005	05/07/2024	Boron, total	45.0	mg/L
07R	Compliance	E005	05/07/2024	Cadmium, total	0.00017 U	mg/L
07R	Compliance	E005	05/07/2024	Calcium, total	680	mg/L
07R	Compliance	E005	05/07/2024	Chloride, total	4.00	mg/L
07R	Compliance	E005	05/07/2024	Chromium, total	0.0011 U	mg/L
07R	Compliance	E005	05/07/2024	Cobalt, total	0.0004 U	mg/L
07R	Compliance	E005	05/07/2024	Dissolved Oxygen	1.01	mg/L
07R	Compliance	E005	05/07/2024	Fluoride, total	0.110	mg/L
07R	Compliance	E005	05/07/2024	Lead, total	0.00019 U	mg/L
07R	Compliance	E005	05/07/2024	Lithium, total	0.630	mg/L
07R	Compliance	E005	05/07/2024	Mercury, total	0.000076 U	mg/L
07R	Compliance	E005	05/07/2024	Molybdenum, total	0.440	mg/L
07R	Compliance	E005	05/07/2024	Oxidation Reduction Potential	-31.4	mV
07R	Compliance	E005	05/07/2024	pH (field)	7.4	SU
07R	Compliance	E005	05/07/2024	Radium 226 + Radium 228, total	0.0984	pCi/L
07R	Compliance	E005	05/07/2024	Selenium, total	0.0150	mg/L
07R	Compliance	E005	05/07/2024	Specific Conductance @ 25C (field)	2,694	micromhos/cm
07R	Compliance	E005	05/07/2024	Sulfate, total	1,900	mg/L
07R	Compliance	E005	05/07/2024	Temperature	15.0	degrees C
07R	Compliance	E005	05/07/2024	Thallium, total	0.00057 U	mg/L
07R	Compliance	E005	05/07/2024	Total Dissolved Solids	3,100	mg/L
07R	Compliance	E005	05/07/2024	Turbidity, field	7.52	NTU
08R	Compliance	E005	06/06/2024	Antimony, total	0.0013 U	mg/L
08R	Compliance	E005	06/06/2024	Arsenic, total	0.0330	mg/L
08R	Compliance	E005	06/06/2024	Barium, total	0.0680	mg/L
08R	Compliance	E005	06/06/2024	Beryllium, total	0.00053 U	mg/L
08R	Compliance	E005	06/06/2024	Boron, total	35.0	mg/L
08R	Compliance	E005	06/06/2024	Cadmium, total	0.00017 U	mg/L
08R	Compliance	E005	06/06/2024	Calcium, total	270	mg/L
08R	Compliance	E005	06/06/2024	Chloride, total	5.70	mg/L
08R	Compliance	E005	06/06/2024	Chromium, total	0.0011 U	mg/L
08R	Compliance	E005	06/06/2024	Cobalt, total	0.0004 U	mg/L
08R	Compliance	E005	06/06/2024	Dissolved Oxygen	4.84	mg/L
08R	Compliance	E005	06/06/2024	Fluoride, total	0.06 J	mg/L
08R	Compliance	E005	06/06/2024	Lead, total	0.00019 U	mg/L
08R	Compliance	E005	06/06/2024	Lithium, total	0.370	mg/L
08R	Compliance	E005	06/06/2024	Mercury, total	0.000076 U	mg/L
08R	Compliance	E005	06/06/2024	Molybdenum, total	0.340	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
08R	Compliance	E005	06/06/2024	Oxidation Reduction Potential	132	mV
08R	Compliance	E005	06/06/2024	pH (field)	7.5	SU
08R	Compliance	E005	06/06/2024	Radium 226 + Radium 228, total	0.395	pCi/L
08R	Compliance	E005	06/06/2024	Selenium, total	0.00098 U	mg/L
08R	Compliance	E005	06/06/2024	Specific Conductance @ 25C (field)	981	micromhos/cm
08R	Compliance	E005	06/06/2024	Sulfate, total	760	mg/L
08R	Compliance	E005	06/06/2024	Temperature	13.4	degrees C
08R	Compliance	E005	06/06/2024	Thallium, total	0.00057 U	mg/L
08R	Compliance	E005	06/06/2024	Total Dissolved Solids	1,300	mg/L
08R	Compliance	E005	06/06/2024	Turbidity, field	67.6	NTU
17	Compliance	E005	05/07/2024	Antimony, total	0.0013 U	mg/L
17	Compliance	E005	05/09/2024	Antimony, total	--	mg/L
17	Compliance	E005	05/07/2024	Arsenic, total	0.00027 J	mg/L
17	Compliance	E005	05/09/2024	Arsenic, total	--	mg/L
17	Compliance	E005	05/07/2024	Barium, total	0.0240	mg/L
17	Compliance	E005	05/09/2024	Barium, total	--	mg/L
17	Compliance	E005	05/07/2024	Beryllium, total	0.00053 U	mg/L
17	Compliance	E005	05/09/2024	Beryllium, total	--	mg/L
17	Compliance	E005	05/07/2024	Boron, total	3.10	mg/L
17	Compliance	E005	05/09/2024	Boron, total	--	mg/L
17	Compliance	E005	05/07/2024	Cadmium, total	0.00017 U	mg/L
17	Compliance	E005	05/09/2024	Cadmium, total	--	mg/L
17	Compliance	E005	05/07/2024	Calcium, total	380	mg/L
17	Compliance	E005	05/09/2024	Calcium, total	--	mg/L
17	Compliance	E005	05/07/2024	Chloride, total	--	mg/L
17	Compliance	E005	05/09/2024	Chloride, total	23.0	mg/L
17	Compliance	E005	05/07/2024	Chromium, total	0.0011 U	mg/L
17	Compliance	E005	05/09/2024	Chromium, total	--	mg/L
17	Compliance	E005	05/07/2024	Cobalt, total	0.0004 J	mg/L
17	Compliance	E005	05/09/2024	Cobalt, total	--	mg/L
17	Compliance	E005	05/07/2024	Dissolved Oxygen	3.37	mg/L
17	Compliance	E005	05/09/2024	Dissolved Oxygen	--	mg/L
17	Compliance	E005	05/07/2024	Fluoride, total	--	mg/L
17	Compliance	E005	05/09/2024	Fluoride, total	0.190	mg/L
17	Compliance	E005	05/07/2024	Lead, total	0.00019 U	mg/L
17	Compliance	E005	05/09/2024	Lead, total	--	mg/L
17	Compliance	E005	05/07/2024	Lithium, total	0.0500	mg/L
17	Compliance	E005	05/09/2024	Lithium, total	--	mg/L
17	Compliance	E005	05/07/2024	Mercury, total	0.000076 U	mg/L
17	Compliance	E005	05/09/2024	Mercury, total	--	mg/L
17	Compliance	E005	05/07/2024	Molybdenum, total	0.0026 J	mg/L
17	Compliance	E005	05/09/2024	Molybdenum, total	--	mg/L
17	Compliance	E005	05/07/2024	Oxidation Reduction Potential	87.1	mV
17	Compliance	E005	05/09/2024	Oxidation Reduction Potential	--	mV
17	Compliance	E005	05/07/2024	pH (field)	6.6	SU
17	Compliance	E005	05/09/2024	pH (field)	--	SU

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
17	Compliance	E005	05/07/2024	Radium 226 + Radium 228, total	--	pCi/L
17	Compliance	E005	05/09/2024	Radium 226 + Radium 228, total	0.26	pCi/L
17	Compliance	E005	05/07/2024	Selenium, total	0.00098 U	mg/L
17	Compliance	E005	05/09/2024	Selenium, total	--	mg/L
17	Compliance	E005	05/07/2024	Specific Conductance @ 25C (field)	2,017	micromhos/cm
17	Compliance	E005	05/09/2024	Specific Conductance @ 25C (field)	--	micromhos/cm
17	Compliance	E005	05/07/2024	Sulfate, total	--	mg/L
17	Compliance	E005	05/09/2024	Sulfate, total	990	mg/L
17	Compliance	E005	05/07/2024	Temperature	13.4	degrees C
17	Compliance	E005	05/09/2024	Temperature	--	degrees C
17	Compliance	E005	05/07/2024	Thallium, total	0.0013 J	mg/L
17	Compliance	E005	05/09/2024	Thallium, total	--	mg/L
17	Compliance	E005	05/07/2024	Total Dissolved Solids	--	mg/L
17	Compliance	E005	05/09/2024	Total Dissolved Solids	2,000	mg/L
17	Compliance	E005	05/07/2024	Turbidity, field	20.9	NTU
17	Compliance	E005	05/09/2024	Turbidity, field	--	NTU
20	Compliance	E005	06/06/2024	Antimony, total	0.0013 U	mg/L
20	Compliance	E005	06/06/2024	Arsenic, total	0.0005 J	mg/L
20	Compliance	E005	06/06/2024	Barium, total	0.0200	mg/L
20	Compliance	E005	06/06/2024	Beryllium, total	0.00053 U	mg/L
20	Compliance	E005	06/06/2024	Boron, total	1.90	mg/L
20	Compliance	E005	06/06/2024	Cadmium, total	0.00017 U	mg/L
20	Compliance	E005	06/06/2024	Calcium, total	96.0	mg/L
20	Compliance	E005	06/06/2024	Chloride, total	4.00	mg/L
20	Compliance	E005	06/06/2024	Chromium, total	0.0011 U	mg/L
20	Compliance	E005	06/06/2024	Cobalt, total	0.0004 U	mg/L
20	Compliance	E005	06/06/2024	Dissolved Oxygen	1.18	mg/L
20	Compliance	E005	06/06/2024	Fluoride, total	0.075 J	mg/L
20	Compliance	E005	06/06/2024	Lead, total	0.00019 U	mg/L
20	Compliance	E005	06/06/2024	Lithium, total	0.0230	mg/L
20	Compliance	E005	06/06/2024	Mercury, total	0.00014 J	mg/L
20	Compliance	E005	06/06/2024	Molybdenum, total	0.0025 U	mg/L
20	Compliance	E005	06/06/2024	Oxidation Reduction Potential	181	mV
20	Compliance	E005	06/06/2024	pH (field)	7.6	SU
20	Compliance	E005	06/06/2024	Radium 226 + Radium 228, total	0.552	pCi/L
20	Compliance	E005	06/06/2024	Selenium, total	0.00098 U	mg/L
20	Compliance	E005	06/06/2024	Specific Conductance @ 25C (field)	736	micromhos/cm
20	Compliance	E005	06/06/2024	Sulfate, total	85.0	mg/L
20	Compliance	E005	06/06/2024	Temperature	17.9	degrees C
20	Compliance	E005	06/06/2024	Thallium, total	0.00057 U	mg/L
20	Compliance	E005	06/06/2024	Total Dissolved Solids	520	mg/L
20	Compliance	E005	06/06/2024	Turbidity, field	35.9	NTU
34	Compliance	E005	05/07/2024	Antimony, total	0.0013 U	mg/L
34	Compliance	E005	05/07/2024	Arsenic, total	0.0240	mg/L
34	Compliance	E005	05/07/2024	Barium, total	0.150	mg/L
34	Compliance	E005	05/07/2024	Beryllium, total	0.00053 U	mg/L

TABLE 1.
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OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
34	Compliance	E005	05/07/2024	Boron, total	0.540	mg/L
34	Compliance	E005	05/07/2024	Cadmium, total	0.00017 U	mg/L
34	Compliance	E005	05/07/2024	Calcium, total	73.0	mg/L
34	Compliance	E005	05/07/2024	Chloride, total	32.0	mg/L
34	Compliance	E005	05/07/2024	Chromium, total	0.0011 U	mg/L
34	Compliance	E005	05/07/2024	Cobalt, total	0.0004 U	mg/L
34	Compliance	E005	05/07/2024	Dissolved Oxygen	0.470	mg/L
34	Compliance	E005	05/07/2024	Fluoride, total	0.630	mg/L
34	Compliance	E005	05/07/2024	Lead, total	0.00019 U	mg/L
34	Compliance	E005	05/07/2024	Lithium, total	0.002 U	mg/L
34	Compliance	E005	05/07/2024	Mercury, total	0.000076 U	mg/L
34	Compliance	E005	05/07/2024	Molybdenum, total	0.0025 U	mg/L
34	Compliance	E005	05/07/2024	Oxidation Reduction Potential	-96.1	mV
34	Compliance	E005	05/07/2024	pH (field)	7.2	SU
34	Compliance	E005	05/07/2024	Radium 226 + Radium 228, total	0.963	pCi/L
34	Compliance	E005	05/07/2024	Selenium, total	0.00098 U	mg/L
34	Compliance	E005	05/07/2024	Specific Conductance @ 25C (field)	909	micromhos/cm
34	Compliance	E005	05/07/2024	Sulfate, total	0.26 J	mg/L
34	Compliance	E005	05/07/2024	Temperature	12.2	degrees C
34	Compliance	E005	05/07/2024	Thallium, total	0.00057 U	mg/L
34	Compliance	E005	05/07/2024	Total Dissolved Solids	530	mg/L
34	Compliance	E005	05/07/2024	Turbidity, field	67.4	NTU
36	Compliance	E005	05/08/2024	Antimony, total	0.0013 U	mg/L
36	Compliance	E005	05/08/2024	Arsenic, total	0.00300	mg/L
36	Compliance	E005	05/08/2024	Barium, total	0.0600	mg/L
36	Compliance	E005	05/08/2024	Beryllium, total	0.00053 U	mg/L
36	Compliance	E005	05/08/2024	Boron, total	15.0	mg/L
36	Compliance	E005	05/08/2024	Cadmium, total	0.00017 U	mg/L
36	Compliance	E005	05/08/2024	Calcium, total	390	mg/L
36	Compliance	E005	05/08/2024	Chloride, total	11.0	mg/L
36	Compliance	E005	05/08/2024	Chromium, total	0.0011 U	mg/L
36	Compliance	E005	05/08/2024	Cobalt, total	0.00046 J	mg/L
36	Compliance	E005	05/08/2024	Dissolved Oxygen	0.0500	mg/L
36	Compliance	E005	05/08/2024	Fluoride, total	0.260	mg/L
36	Compliance	E005	05/08/2024	Lead, total	0.00019 U	mg/L
36	Compliance	E005	05/08/2024	Lithium, total	0.290	mg/L
36	Compliance	E005	05/08/2024	Mercury, total	0.000076 U	mg/L
36	Compliance	E005	05/08/2024	Molybdenum, total	0.220	mg/L
36	Compliance	E005	05/08/2024	Oxidation Reduction Potential	-74.7	mV
36	Compliance	E005	05/08/2024	pH (field)	7.4	SU
36	Compliance	E005	05/08/2024	Radium 226 + Radium 228, total	1.04	pCi/L
36	Compliance	E005	05/08/2024	Selenium, total	0.00098 U	mg/L
36	Compliance	E005	05/08/2024	Specific Conductance @ 25C (field)	1,855	micromhos/cm
36	Compliance	E005	05/08/2024	Sulfate, total	1,100	mg/L
36	Compliance	E005	05/08/2024	Temperature	11.7	degrees C
36	Compliance	E005	05/08/2024	Thallium, total	0.00057 U	mg/L

TABLE 1.
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OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
36	Compliance	E005	05/08/2024	Total Dissolved Solids	1,800	mg/L
36	Compliance	E005	05/08/2024	Turbidity, field	11.7	NTU
37	Compliance	E005	05/08/2024	Antimony, total	0.0013 U	mg/L
37	Compliance	E005	05/08/2024	Arsenic, total	0.0370	mg/L
37	Compliance	E005	05/08/2024	Barium, total	0.330	mg/L
37	Compliance	E005	05/08/2024	Beryllium, total	0.00053 U	mg/L
37	Compliance	E005	05/08/2024	Boron, total	1.90	mg/L
37	Compliance	E005	05/08/2024	Cadmium, total	0.00017 U	mg/L
37	Compliance	E005	05/08/2024	Calcium, total	120	mg/L
37	Compliance	E005	05/08/2024	Chloride, total	42.0	mg/L
37	Compliance	E005	05/08/2024	Chromium, total	0.0011 U	mg/L
37	Compliance	E005	05/08/2024	Cobalt, total	0.0004 U	mg/L
37	Compliance	E005	05/08/2024	Dissolved Oxygen	0.0900	mg/L
37	Compliance	E005	05/08/2024	Fluoride, total	0.620	mg/L
37	Compliance	E005	05/08/2024	Lead, total	0.00032 J	mg/L
37	Compliance	E005	05/08/2024	Lithium, total	0.0028 J	mg/L
37	Compliance	E005	05/08/2024	Mercury, total	0.000076 U	mg/L
37	Compliance	E005	05/08/2024	Molybdenum, total	0.0025 U	mg/L
37	Compliance	E005	05/08/2024	Oxidation Reduction Potential	-111	mV
37	Compliance	E005	05/08/2024	pH (field)	7.0	SU
37	Compliance	E005	05/08/2024	Radium 226 + Radium 228, total	2.28	pCi/L
37	Compliance	E005	05/08/2024	Selenium, total	0.00098 U	mg/L
37	Compliance	E005	05/08/2024	Specific Conductance @ 25C (field)	1,339	micromhos/cm
37	Compliance	E005	05/08/2024	Sulfate, total	310	mg/L
37	Compliance	E005	05/08/2024	Temperature	12.9	degrees C
37	Compliance	E005	05/08/2024	Thallium, total	0.00057 U	mg/L
37	Compliance	E005	05/08/2024	Total Dissolved Solids	950	mg/L
37	Compliance	E005	05/08/2024	Turbidity, field	12.7	NTU
38	Compliance	E005	05/08/2024	Antimony, total	0.0013 U	mg/L
38	Compliance	E005	05/08/2024	Arsenic, total	0.0290	mg/L
38	Compliance	E005	05/08/2024	Barium, total	0.200	mg/L
38	Compliance	E005	05/08/2024	Beryllium, total	0.00053 U	mg/L
38	Compliance	E005	05/08/2024	Boron, total	0.480	mg/L
38	Compliance	E005	05/08/2024	Cadmium, total	0.00017 U	mg/L
38	Compliance	E005	05/08/2024	Calcium, total	75.0	mg/L
38	Compliance	E005	05/08/2024	Chloride, total	16.0	mg/L
38	Compliance	E005	05/08/2024	Chromium, total	0.0011 U	mg/L
38	Compliance	E005	05/08/2024	Cobalt, total	0.0004 U	mg/L
38	Compliance	E005	05/08/2024	Dissolved Oxygen	1.60	mg/L
38	Compliance	E005	05/08/2024	Fluoride, total	0.390	mg/L
38	Compliance	E005	05/08/2024	Lead, total	0.00019 J	mg/L
38	Compliance	E005	05/08/2024	Lithium, total	0.003 J	mg/L
38	Compliance	E005	05/08/2024	Mercury, total	0.000076 U	mg/L
38	Compliance	E005	05/08/2024	Molybdenum, total	0.0025 U	mg/L
38	Compliance	E005	05/08/2024	Oxidation Reduction Potential	-107	mV
38	Compliance	E005	05/08/2024	pH (field)	7.1	SU

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
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VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
38	Compliance	E005	05/08/2024	Radium 226 + Radium 228, total	1.41	pCi/L
38	Compliance	E005	05/08/2024	Selenium, total	0.00098 U	mg/L
38	Compliance	E005	05/08/2024	Specific Conductance @ 25C (field)	957	micromhos/cm
38	Compliance	E005	05/08/2024	Sulfate, total	0.84 J	mg/L
38	Compliance	E005	05/08/2024	Temperature	12.4	degrees C
38	Compliance	E005	05/08/2024	Thallium, total	0.00057 U	mg/L
38	Compliance	E005	05/08/2024	Total Dissolved Solids	530	mg/L
38	Compliance	E005	05/08/2024	Turbidity, field	22.5	NTU
40	Compliance	E005	05/07/2024	Antimony, total	0.0013 U	mg/L
40	Compliance	E005	05/07/2024	Arsenic, total	0.0180	mg/L
40	Compliance	E005	05/07/2024	Barium, total	0.0270	mg/L
40	Compliance	E005	05/07/2024	Beryllium, total	0.00053 U	mg/L
40	Compliance	E005	05/07/2024	Boron, total	21.0	mg/L
40	Compliance	E005	05/07/2024	Cadmium, total	0.00017 U	mg/L
40	Compliance	E005	05/07/2024	Calcium, total	660	mg/L
40	Compliance	E005	05/07/2024	Chloride, total	11.0	mg/L
40	Compliance	E005	05/07/2024	Chromium, total	0.0011 U	mg/L
40	Compliance	E005	05/07/2024	Cobalt, total	0.00580	mg/L
40	Compliance	E005	05/07/2024	Dissolved Oxygen	0.190	mg/L
40	Compliance	E005	05/07/2024	Fluoride, total	0.056 U	mg/L
40	Compliance	E005	05/07/2024	Lead, total	0.00025 J	mg/L
40	Compliance	E005	05/07/2024	Lithium, total	0.840	mg/L
40	Compliance	E005	05/07/2024	Mercury, total	0.000076 U	mg/L
40	Compliance	E005	05/07/2024	Molybdenum, total	0.0570	mg/L
40	Compliance	E005	05/07/2024	Oxidation Reduction Potential	-76.0	mV
40	Compliance	E005	05/07/2024	pH (field)	6.5	SU
40	Compliance	E005	05/07/2024	Radium 226 + Radium 228, total	0.91	pCi/L
40	Compliance	E005	05/07/2024	Selenium, total	0.00098 U	mg/L
40	Compliance	E005	05/07/2024	Specific Conductance @ 25C (field)	3,796	micromhos/cm
40	Compliance	E005	05/07/2024	Sulfate, total	3,000	mg/L
40	Compliance	E005	05/07/2024	Temperature	15.2	degrees C
40	Compliance	E005	05/07/2024	Thallium, total	0.00057 U	mg/L
40	Compliance	E005	05/07/2024	Total Dissolved Solids	4,700 J	mg/L
40	Compliance	E005	05/07/2024	Turbidity, field	2.77	NTU
41	Compliance	E005	05/08/2024	Antimony, total	0.0013 U	mg/L
41	Compliance	E005	05/08/2024	Arsenic, total	0.0130	mg/L
41	Compliance	E005	05/08/2024	Barium, total	0.230	mg/L
41	Compliance	E005	05/08/2024	Beryllium, total	0.00053 U	mg/L
41	Compliance	E005	05/08/2024	Boron, total	3.10	mg/L
41	Compliance	E005	05/08/2024	Cadmium, total	0.00017 U	mg/L
41	Compliance	E005	05/08/2024	Calcium, total	83.0	mg/L
41	Compliance	E005	05/08/2024	Chloride, total	49.0	mg/L
41	Compliance	E005	05/08/2024	Chromium, total	0.0013 J	mg/L
41	Compliance	E005	05/08/2024	Cobalt, total	0.00046 J	mg/L
41	Compliance	E005	05/08/2024	Dissolved Oxygen	0.120	mg/L
41	Compliance	E005	05/08/2024	Fluoride, total	0.420	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 2, 2024
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VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
41	Compliance	E005	05/08/2024	Lead, total	0.00034 J	mg/L
41	Compliance	E005	05/08/2024	Lithium, total	0.0047 J	mg/L
41	Compliance	E005	05/08/2024	Mercury, total	0.000076 U	mg/L
41	Compliance	E005	05/08/2024	Molybdenum, total	0.0025 U	mg/L
41	Compliance	E005	05/08/2024	Oxidation Reduction Potential	-112	mV
41	Compliance	E005	05/08/2024	pH (field)	7.2	SU
41	Compliance	E005	05/08/2024	Radium 226 + Radium 228, total	1.55	pCi/L
41	Compliance	E005	05/08/2024	Selenium, total	0.00098 U	mg/L
41	Compliance	E005	05/08/2024	Specific Conductance @ 25C (field)	1,128	micromhos/cm
41	Compliance	E005	05/08/2024	Sulfate, total	0.27 J	mg/L
41	Compliance	E005	05/08/2024	Temperature	14.0	degrees C
41	Compliance	E005	05/08/2024	Thallium, total	0.00057 U	mg/L
41	Compliance	E005	05/08/2024	Total Dissolved Solids	660	mg/L
41	Compliance	E005	05/08/2024	Turbidity, field	24.6	NTU

Notes:
1. Monitoring well 17 went dry during sampling initiated on 05/07/2024. The sampling team revisited well 17 on 05/09/2024 to complete sample collection.
– = no data available
C = Celsius
cm = centimeter
mg/L = milligrams per liter
mV = millivolts
NTU = Nephelometric Turbidity Units
pCi/L = picocuries per liter
SU = Standard Units
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+ = The result is an estimated quantity, but the result may be biased high.
U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.
UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
21	Background	E006	07/30/2024	Antimony, total	0.0013 U	mg/L
21	Background	E006	07/30/2024	Arsenic, total	0.0440	mg/L
21	Background	E006	07/30/2024	Barium, total	0.110	mg/L
21	Background	E006	07/30/2024	Beryllium, total	0.00053 U	mg/L
21	Background	E006	07/30/2024	Boron, total	0.830 J+	mg/L
21	Background	E006	07/30/2024	Cadmium, total	0.00017 U	mg/L
21	Background	E006	07/30/2024	Calcium, total	67.0	mg/L
21	Background	E006	07/30/2024	Chloride, total	1.70	mg/L
21	Background	E006	07/30/2024	Chromium, total	0.0011 U	mg/L
21	Background	E006	07/30/2024	Cobalt, total	0.0004 U	mg/L
21	Background	E006	07/30/2024	Dissolved Oxygen	0.260	mg/L
21	Background	E006	07/30/2024	Fluoride, total	1.00	mg/L
21	Background	E006	07/30/2024	Lead, total	0.00019 U	mg/L
21	Background	E006	07/30/2024	Lithium, total	0.0025 J	mg/L
21	Background	E006	07/30/2024	Mercury, total	0.000076 U	mg/L
21	Background	E006	07/30/2024	Molybdenum, total	0.0031 J	mg/L
21	Background	E006	07/30/2024	Oxidation Reduction Potential	-181	mV
21	Background	E006	07/30/2024	pH (field)	7.6	SU
21	Background	E006	07/30/2024	Radium 226 + Radium 228, total	1.16	pCi/L
21	Background	E006	07/30/2024	Selenium, total	0.00098 U	mg/L
21	Background	E006	07/30/2024	Specific Conductance @ 25C (field)	801	micromhos/cm
21	Background	E006	07/30/2024	Sulfate, total	21.0 J	mg/L
21	Background	E006	07/30/2024	Temperature	14.8	degrees C
21	Background	E006	07/30/2024	Thallium, total	0.00057 U	mg/L
21	Background	E006	07/30/2024	Total Dissolved Solids	400	mg/L
21	Background	E006	07/30/2024	Turbidity, field	54.7	NTU
42	Background	E006	07/30/2024	Antimony, total	0.0013 U	mg/L
42	Background	E006	07/30/2024	Arsenic, total	0.0200	mg/L
42	Background	E006	07/30/2024	Barium, total	0.150	mg/L
42	Background	E006	07/30/2024	Beryllium, total	0.00053 U	mg/L
42	Background	E006	07/30/2024	Boron, total	0.660 J+	mg/L
42	Background	E006	07/30/2024	Cadmium, total	0.00017 U	mg/L
42	Background	E006	07/30/2024	Calcium, total	84.0	mg/L
42	Background	E006	07/30/2024	Chloride, total	15.0	mg/L
42	Background	E006	07/30/2024	Chromium, total	0.0011 U	mg/L
42	Background	E006	07/30/2024	Cobalt, total	0.0004 U	mg/L
42	Background	E006	07/30/2024	Dissolved Oxygen	1.18	mg/L
42	Background	E006	07/30/2024	Fluoride, total	0.550	mg/L
42	Background	E006	07/30/2024	Lead, total	0.00019 U	mg/L
42	Background	E006	07/30/2024	Lithium, total	0.003 J	mg/L
42	Background	E006	07/30/2024	Mercury, total	0.000076 U	mg/L
42	Background	E006	07/30/2024	Molybdenum, total	0.0025 U	mg/L
42	Background	E006	07/30/2024	Oxidation Reduction Potential	-138	mV
42	Background	E006	07/30/2024	pH (field)	7.6	SU
42	Background	E006	07/30/2024	Radium 226 + Radium 228, total	0.564	pCi/L
42	Background	E006	07/30/2024	Selenium, total	0.00098 U	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
42	Background	E006	07/30/2024	Specific Conductance @ 25C (field)	1,125	micromhos/cm
42	Background	E006	07/30/2024	Sulfate, total	58.0	mg/L
42	Background	E006	07/30/2024	Temperature	12.6	degrees C
42	Background	E006	07/30/2024	Thallium, total	0.00057 U	mg/L
42	Background	E006	07/30/2024	Total Dissolved Solids	580	mg/L
42	Background	E006	07/30/2024	Turbidity, field	5.40	NTU
43	Background	E006	07/30/2024	Antimony, total	0.0013 U	mg/L
43	Background	E006	07/30/2024	Arsenic, total	0.0110	mg/L
43	Background	E006	07/30/2024	Barium, total	0.430	mg/L
43	Background	E006	07/30/2024	Beryllium, total	0.00053 U	mg/L
43	Background	E006	07/30/2024	Boron, total	1.00	mg/L
43	Background	E006	07/30/2024	Cadmium, total	0.00017 U	mg/L
43	Background	E006	07/30/2024	Calcium, total	85.0	mg/L
43	Background	E006	07/30/2024	Chloride, total	62.0	mg/L
43	Background	E006	07/30/2024	Chromium, total	0.0011 U	mg/L
43	Background	E006	07/30/2024	Cobalt, total	0.0004 U	mg/L
43	Background	E006	07/30/2024	Dissolved Oxygen	0.940	mg/L
43	Background	E006	07/30/2024	Fluoride, total	0.490	mg/L
43	Background	E006	07/30/2024	Lead, total	0.0005 UJ	mg/L
43	Background	E006	07/30/2024	Lithium, total	0.0110	mg/L
43	Background	E006	07/30/2024	Mercury, total	0.000076 U	mg/L
43	Background	E006	07/30/2024	Molybdenum, total	0.0025 U	mg/L
43	Background	E006	07/30/2024	Oxidation Reduction Potential	-102	mV
43	Background	E006	07/30/2024	pH (field)	7.2	SU
43	Background	E006	07/30/2024	Radium 226 + Radium 228, total	0.69	pCi/L
43	Background	E006	07/30/2024	Selenium, total	0.00098 U	mg/L
43	Background	E006	07/30/2024	Specific Conductance @ 25C (field)	1,129	micromhos/cm
43	Background	E006	07/30/2024	Sulfate, total	66.0	mg/L
43	Background	E006	07/30/2024	Temperature	14.9	degrees C
43	Background	E006	07/30/2024	Thallium, total	0.00057 U	mg/L
43	Background	E006	07/30/2024	Total Dissolved Solids	690	mg/L
43	Background	E006	07/30/2024	Turbidity, field	25.3	NTU
101	Background	E006	--	Antimony, total	NS ⁷	mg/L
101	Background	E006	--	Arsenic, total	NS ⁷	mg/L
101	Background	E006	--	Barium, total	NS ⁷	mg/L
101	Background	E006	--	Beryllium, total	NS ⁷	mg/L
101	Background	E006	--	Boron, total	NS ⁷	mg/L
101	Background	E006	--	Cadmium, total	NS ⁷	mg/L
101	Background	E006	--	Calcium, total	NS ⁷	mg/L
101	Background	E006	--	Chloride, total	NS ⁷	mg/L
101	Background	E006	--	Chromium, total	NS ⁷	mg/L
101	Background	E006	--	Cobalt, total	NS ⁷	mg/L
101	Background	E006	--	Dissolved Oxygen	NS ⁷	mg/L
101	Background	E006	--	Fluoride, total	NS ⁷	mg/L
101	Background	E006	--	Lead, total	NS ⁷	mg/L
101	Background	E006	--	Lithium, total	NS ⁷	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
101	Background	E006	--	Mercury, total	NS ⁷	mg/L
101	Background	E006	--	Molybdenum, total	NS ⁷	mg/L
101	Background	E006	--	Oxidation Reduction Potential	NS ⁷	mV
101	Background	E006	--	pH (field)	NS ⁷	SU
101	Background	E006	--	Radium 226 + Radium 228, total	NS ⁷	pCi/L
101	Background	E006	--	Selenium, total	NS ⁷	mg/L
101	Background	E006	--	Specific Conductance @ 25C (field)	NS ⁷	micromhos/cm
101	Background	E006	--	Sulfate, total	NS ⁷	mg/L
101	Background	E006	--	Temperature	NS ⁷	degrees C
101	Background	E006	--	Thallium, total	NS ⁷	mg/L
101	Background	E006	--	Total Dissolved Solids	NS ⁷	mg/L
101	Background	E006	--	Turbidity, field	NS ⁷	NTU
103	Background	E006	--	Antimony, total	NS ⁷	mg/L
103	Background	E006	--	Arsenic, total	NS ⁷	mg/L
103	Background	E006	--	Barium, total	NS ⁷	mg/L
103	Background	E006	--	Beryllium, total	NS ⁷	mg/L
103	Background	E006	--	Boron, total	NS ⁷	mg/L
103	Background	E006	--	Cadmium, total	NS ⁷	mg/L
103	Background	E006	--	Calcium, total	NS ⁷	mg/L
103	Background	E006	--	Chloride, total	NS ⁷	mg/L
103	Background	E006	--	Chromium, total	NS ⁷	mg/L
103	Background	E006	--	Cobalt, total	NS ⁷	mg/L
103	Background	E006	--	Dissolved Oxygen	NS ⁷	mg/L
103	Background	E006	--	Fluoride, total	NS ⁷	mg/L
103	Background	E006	--	Lead, total	NS ⁷	mg/L
103	Background	E006	--	Lithium, total	NS ⁷	mg/L
103	Background	E006	--	Mercury, total	NS ⁷	mg/L
103	Background	E006	--	Molybdenum, total	NS ⁷	mg/L
103	Background	E006	--	Oxidation Reduction Potential	NS ⁷	mV
103	Background	E006	--	pH (field)	NS ⁷	SU
103	Background	E006	--	Radium 226 + Radium 228, total	NS ⁷	pCi/L
103	Background	E006	--	Selenium, total	NS ⁷	mg/L
103	Background	E006	--	Specific Conductance @ 25C (field)	NS ⁷	micromhos/cm
103	Background	E006	--	Sulfate, total	NS ⁷	mg/L
103	Background	E006	--	Temperature	NS ⁷	degrees C
103	Background	E006	--	Thallium, total	NS ⁷	mg/L
103	Background	E006	--	Total Dissolved Solids	NS ⁷	mg/L
103	Background	E006	--	Turbidity, field	NS ⁷	NTU
02	Compliance	E006	--	Antimony, total	NS ²	mg/L
02	Compliance	E006	--	Arsenic, total	NS ²	mg/L
02	Compliance	E006	--	Barium, total	NS ²	mg/L
02	Compliance	E006	--	Beryllium, total	NS ²	mg/L
02	Compliance	E006	--	Boron, total	NS ²	mg/L
02	Compliance	E006	--	Cadmium, total	NS ²	mg/L
02	Compliance	E006	--	Calcium, total	NS ²	mg/L
02	Compliance	E006	--	Chloride, total	NS ²	mg/L

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845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
02	Compliance	E006	--	Chromium, total	NS ²	mg/L
02	Compliance	E006	--	Cobalt, total	NS ²	mg/L
02	Compliance	E006	--	Dissolved Oxygen	NS ²	mg/L
02	Compliance	E006	--	Fluoride, total	NS ²	mg/L
02	Compliance	E006	--	Lead, total	NS ²	mg/L
02	Compliance	E006	--	Lithium, total	NS ²	mg/L
02	Compliance	E006	--	Mercury, total	NS ²	mg/L
02	Compliance	E006	--	Molybdenum, total	NS ²	mg/L
02	Compliance	E006	--	Oxidation Reduction Potential	NS ²	mV
02	Compliance	E006	--	pH (field)	NS ²	SU
02	Compliance	E006	--	Radium 226 + Radium 228, total	NS ²	pCi/L
02	Compliance	E006	--	Selenium, total	NS ²	mg/L
02	Compliance	E006	--	Specific Conductance @ 25C (field)	NS ²	micromhos/cm
02	Compliance	E006	--	Sulfate, total	NS ²	mg/L
02	Compliance	E006	--	Temperature	NS ²	degrees C
02	Compliance	E006	--	Thallium, total	NS ²	mg/L
02	Compliance	E006	--	Total Dissolved Solids	NS ²	mg/L
02	Compliance	E006	--	Turbidity, field	NS ²	NTU
03R	Compliance	E006	07/31/2024	Antimony, total	0.0013 U	mg/L
03R	Compliance	E006	07/31/2024	Arsenic, total	0.00580	mg/L
03R	Compliance	E006	07/31/2024	Barium, total	0.310	mg/L
03R	Compliance	E006	07/31/2024	Beryllium, total	0.00053 U	mg/L
03R	Compliance	E006	07/31/2024	Boron, total	30.0	mg/L
03R	Compliance	E006	07/31/2024	Cadmium, total	0.00017 U	mg/L
03R	Compliance	E006	07/31/2024	Calcium, total	170	mg/L
03R	Compliance	E006	07/31/2024	Chloride, total	22.0	mg/L
03R	Compliance	E006	07/31/2024	Chromium, total	0.005 UJ	mg/L
03R	Compliance	E006	07/31/2024	Cobalt, total	0.00063 J	mg/L
03R	Compliance	E006	07/31/2024	Dissolved Oxygen	0.210	mg/L
03R	Compliance	E006	07/31/2024	Fluoride, total	0.430	mg/L
03R	Compliance	E006	07/31/2024	Lead, total	0.00110 J+	mg/L
03R	Compliance	E006	07/31/2024	Lithium, total	0.00550	mg/L
03R	Compliance	E006	07/31/2024	Mercury, total	0.000076 U	mg/L
03R	Compliance	E006	07/31/2024	Molybdenum, total	0.370	mg/L
03R	Compliance	E006	07/31/2024	Oxidation Reduction Potential	-130	mV
03R	Compliance	E006	07/31/2024	pH (field)	7.4	SU
03R	Compliance	E006	07/31/2024	Radium 226 + Radium 228, total	1.89	pCi/L
03R	Compliance	E006	07/31/2024	Selenium, total	0.00098 U	mg/L
03R	Compliance	E006	07/31/2024	Specific Conductance @ 25C (field)	1,829	micromhos/cm
03R	Compliance	E006	07/31/2024	Sulfate, total	580	mg/L
03R	Compliance	E006	07/31/2024	Temperature	13.4	degrees C
03R	Compliance	E006	07/31/2024	Thallium, total	0.00057 U	mg/L
03R	Compliance	E006	07/31/2024	Total Dissolved Solids	1,300	mg/L
03R	Compliance	E006	07/31/2024	Turbidity, field	25.2	NTU
04	Compliance	E006	07/31/2024	Antimony, total	0.0013 U	mg/L
04	Compliance	E006	07/31/2024	Arsenic, total	0.00590	mg/L

TABLE 1.
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OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
04	Compliance	E006	07/31/2024	Barium, total	0.240	mg/L
04	Compliance	E006	07/31/2024	Beryllium, total	0.00053 U	mg/L
04	Compliance	E006	07/31/2024	Boron, total	10.0	mg/L
04	Compliance	E006	07/31/2024	Cadmium, total	0.00017 U	mg/L
04	Compliance	E006	07/31/2024	Calcium, total	69.0	mg/L
04	Compliance	E006	07/31/2024	Chloride, total	10.0	mg/L
04	Compliance	E006	07/31/2024	Chromium, total	0.0011 U	mg/L
04	Compliance	E006	07/31/2024	Cobalt, total	0.00056 J	mg/L
04	Compliance	E006	07/31/2024	Dissolved Oxygen	0.160	mg/L
04	Compliance	E006	07/31/2024	Fluoride, total	0.320	mg/L
04	Compliance	E006	07/31/2024	Lead, total	0.00019 U	mg/L
04	Compliance	E006	07/31/2024	Lithium, total	0.0540	mg/L
04	Compliance	E006	07/31/2024	Mercury, total	0.000076 U	mg/L
04	Compliance	E006	07/31/2024	Molybdenum, total	0.0360	mg/L
04	Compliance	E006	07/31/2024	Oxidation Reduction Potential	-151	mV
04	Compliance	E006	07/31/2024	pH (field)	7.6	SU
04	Compliance	E006	07/31/2024	Radium 226 + Radium 228, total	1.03	pCi/L
04	Compliance	E006	07/31/2024	Selenium, total	0.00098 U	mg/L
04	Compliance	E006	07/31/2024	Specific Conductance @ 25C (field)	603	micromhos/cm
04	Compliance	E006	07/31/2024	Sulfate, total	27.0	mg/L
04	Compliance	E006	07/31/2024	Temperature	15.1	degrees C
04	Compliance	E006	07/31/2024	Thallium, total	0.00057 U	mg/L
04	Compliance	E006	07/31/2024	Total Dissolved Solids	440	mg/L
04	Compliance	E006	07/31/2024	Turbidity, field	1.38	NTU
05	Compliance	E006	08/01/2024	Antimony, total	0.0013 U	mg/L
05	Compliance	E006	08/01/2024	Arsenic, total	0.00023 J	mg/L
05	Compliance	E006	08/01/2024	Barium, total	0.0280	mg/L
05	Compliance	E006	08/01/2024	Beryllium, total	0.00053 U	mg/L
05	Compliance	E006	08/01/2024	Boron, total	16.0	mg/L
05	Compliance	E006	08/01/2024	Cadmium, total	0.00017 U	mg/L
05	Compliance	E006	08/01/2024	Calcium, total	110	mg/L
05	Compliance	E006	08/01/2024	Chloride, total	6.50	mg/L
05	Compliance	E006	08/01/2024	Chromium, total	0.0011 U	mg/L
05	Compliance	E006	08/01/2024	Cobalt, total	0.00079 J	mg/L
05	Compliance	E006	08/01/2024	Dissolved Oxygen	0.200	mg/L
05	Compliance	E006	08/01/2024	Fluoride, total	0.650	mg/L
05	Compliance	E006	08/01/2024	Lead, total	0.00019 U	mg/L
05	Compliance	E006	08/01/2024	Lithium, total	0.100	mg/L
05	Compliance	E006	08/01/2024	Mercury, total	0.000076 U	mg/L
05	Compliance	E006	08/01/2024	Molybdenum, total	0.0400	mg/L
05	Compliance	E006	08/01/2024	Oxidation Reduction Potential	33.8	mV
05	Compliance	E006	08/01/2024	pH (field)	7.5	SU
05	Compliance	E006	08/01/2024	Radium 226 + Radium 228, total	0.418	pCi/L
05	Compliance	E006	08/01/2024	Selenium, total	0.00098 U	mg/L
05	Compliance	E006	08/01/2024	Specific Conductance @ 25C (field)	1,001	micromhos/cm
05	Compliance	E006	08/01/2024	Sulfate, total	250	mg/L

TABLE 1.
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OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
05	Compliance	E006	08/01/2024	Temperature	14.1	degrees C
05	Compliance	E006	08/01/2024	Thallium, total	0.00057 U	mg/L
05	Compliance	E006	08/01/2024	Total Dissolved Solids	630	mg/L
05	Compliance	E006	08/01/2024	Turbidity, field	3.45	NTU
07R	Compliance	E006	--	Antimony, total	NS ²	mg/L
07R	Compliance	E006	--	Arsenic, total	NS ²	mg/L
07R	Compliance	E006	--	Barium, total	NS ²	mg/L
07R	Compliance	E006	--	Beryllium, total	NS ²	mg/L
07R	Compliance	E006	--	Boron, total	NS ²	mg/L
07R	Compliance	E006	--	Cadmium, total	NS ²	mg/L
07R	Compliance	E006	--	Calcium, total	NS ²	mg/L
07R	Compliance	E006	--	Chloride, total	NS ²	mg/L
07R	Compliance	E006	--	Chromium, total	NS ²	mg/L
07R	Compliance	E006	--	Cobalt, total	NS ²	mg/L
07R	Compliance	E006	--	Dissolved Oxygen	NS ²	mg/L
07R	Compliance	E006	--	Fluoride, total	NS ²	mg/L
07R	Compliance	E006	--	Lead, total	NS ²	mg/L
07R	Compliance	E006	--	Lithium, total	NS ²	mg/L
07R	Compliance	E006	--	Mercury, total	NS ²	mg/L
07R	Compliance	E006	--	Molybdenum, total	NS ²	mg/L
07R	Compliance	E006	--	Oxidation Reduction Potential	NS ²	mV
07R	Compliance	E006	--	pH (field)	NS ²	SU
07R	Compliance	E006	--	Radium 226 + Radium 228, total	NS ²	pCi/L
07R	Compliance	E006	--	Selenium, total	NS ²	mg/L
07R	Compliance	E006	--	Specific Conductance @ 25C (field)	NS ²	micromhos/cm
07R	Compliance	E006	--	Sulfate, total	NS ²	mg/L
07R	Compliance	E006	--	Temperature	NS ²	degrees C
07R	Compliance	E006	--	Thallium, total	NS ²	mg/L
07R	Compliance	E006	--	Total Dissolved Solids	NS ²	mg/L
07R	Compliance	E006	--	Turbidity, field	NS ²	NTU
08R	Compliance	E006	07/31/2024	Antimony, total	0.0013 U	mg/L
08R	Compliance	E006	07/31/2024	Arsenic, total	0.0340	mg/L
08R	Compliance	E006	07/31/2024	Barium, total	0.0510	mg/L
08R	Compliance	E006	07/31/2024	Beryllium, total	0.00053 U	mg/L
08R	Compliance	E006	07/31/2024	Boron, total	37.0	mg/L
08R	Compliance	E006	07/31/2024	Cadmium, total	0.00017 U	mg/L
08R	Compliance	E006	07/31/2024	Calcium, total	260	mg/L
08R	Compliance	E006	07/31/2024	Chloride, total	4.90	mg/L
08R	Compliance	E006	07/31/2024	Chromium, total	0.0011 U	mg/L
08R	Compliance	E006	07/31/2024	Cobalt, total	0.0004 U	mg/L
08R	Compliance	E006	07/31/2024	Dissolved Oxygen	0.290	mg/L
08R	Compliance	E006	07/31/2024	Fluoride, total	0.056 U	mg/L
08R	Compliance	E006	07/31/2024	Lead, total	0.00019 U	mg/L
08R	Compliance	E006	07/31/2024	Lithium, total	0.410	mg/L
08R	Compliance	E006	07/31/2024	Mercury, total	0.000076 U	mg/L
08R	Compliance	E006	07/31/2024	Molybdenum, total	0.310	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
08R	Compliance	E006	07/31/2024	Oxidation Reduction Potential	-121	mV
08R	Compliance	E006	07/31/2024	pH (field)	7.8	SU
08R	Compliance	E006	07/31/2024	Radium 226 + Radium 228, total	0.961	pCi/L
08R	Compliance	E006	07/31/2024	Selenium, total	0.00098 U	mg/L
08R	Compliance	E006	07/31/2024	Specific Conductance @ 25C (field)	1,716	micromhos/cm
08R	Compliance	E006	07/31/2024	Sulfate, total	760	mg/L
08R	Compliance	E006	07/31/2024	Temperature	15.2	degrees C
08R	Compliance	E006	07/31/2024	Thallium, total	0.00057 U	mg/L
08R	Compliance	E006	07/31/2024	Total Dissolved Solids	1,300	mg/L
08R	Compliance	E006	07/31/2024	Turbidity, field	14	NTU
17	Compliance	E006	--	Antimony, total	NS ²	mg/L
17	Compliance	E006	--	Arsenic, total	NS ²	mg/L
17	Compliance	E006	--	Barium, total	NS ²	mg/L
17	Compliance	E006	--	Beryllium, total	NS ²	mg/L
17	Compliance	E006	--	Boron, total	NS ²	mg/L
17	Compliance	E006	--	Cadmium, total	NS ²	mg/L
17	Compliance	E006	--	Calcium, total	NS ²	mg/L
17	Compliance	E006	--	Chloride, total	NS ²	mg/L
17	Compliance	E006	--	Chromium, total	NS ²	mg/L
17	Compliance	E006	--	Cobalt, total	NS ²	mg/L
17	Compliance	E006	--	Dissolved Oxygen	NS ²	mg/L
17	Compliance	E006	--	Fluoride, total	NS ²	mg/L
17	Compliance	E006	--	Lead, total	NS ²	mg/L
17	Compliance	E006	--	Lithium, total	NS ²	mg/L
17	Compliance	E006	--	Mercury, total	NS ²	mg/L
17	Compliance	E006	--	Molybdenum, total	NS ²	mg/L
17	Compliance	E006	--	Oxidation Reduction Potential	NS ²	mV
17	Compliance	E006	--	pH (field)	NS ²	SU
17	Compliance	E006	--	Radium 226 + Radium 228, total	NS ²	pCi/L
17	Compliance	E006	--	Selenium, total	NS ²	mg/L
17	Compliance	E006	--	Specific Conductance @ 25C (field)	NS ²	micromhos/cm
17	Compliance	E006	--	Sulfate, total	NS ²	mg/L
17	Compliance	E006	--	Temperature	NS ²	degrees C
17	Compliance	E006	--	Thallium, total	NS ²	mg/L
17	Compliance	E006	--	Total Dissolved Solids	NS ²	mg/L
17	Compliance	E006	--	Turbidity, field	NS ²	NTU
20	Compliance	E006	07/31/2024	Antimony, total	0.0013 U	mg/L
20	Compliance	E006	07/31/2024	Arsenic, total	0.00130	mg/L
20	Compliance	E006	07/31/2024	Barium, total	0.0200	mg/L
20	Compliance	E006	07/31/2024	Beryllium, total	0.00053 U	mg/L
20	Compliance	E006	07/31/2024	Boron, total	1.80	mg/L
20	Compliance	E006	07/31/2024	Cadmium, total	0.00017 U	mg/L
20	Compliance	E006	07/31/2024	Calcium, total	92.0	mg/L
20	Compliance	E006	07/31/2024	Chloride, total	3.40	mg/L
20	Compliance	E006	07/31/2024	Chromium, total	0.0011 U	mg/L
20	Compliance	E006	07/31/2024	Cobalt, total	0.0004 U	mg/L

TABLE 1.
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VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
20	Compliance	E006	07/31/2024	Dissolved Oxygen	0.210	mg/L
20	Compliance	E006	07/31/2024	Fluoride, total	0.082 J	mg/L
20	Compliance	E006	07/31/2024	Lead, total	0.00019 U	mg/L
20	Compliance	E006	07/31/2024	Lithium, total	0.0280	mg/L
20	Compliance	E006	07/31/2024	Mercury, total	0.000076 U	mg/L
20	Compliance	E006	07/31/2024	Molybdenum, total	0.0025 U	mg/L
20	Compliance	E006	07/31/2024	Oxidation Reduction Potential	-20.3	mV
20	Compliance	E006	07/31/2024	pH (field)	7.1	SU
20	Compliance	E006	07/31/2024	Radium 226 + Radium 228, total	0.921	pCi/L
20	Compliance	E006	07/31/2024	Selenium, total	0.00098 U	mg/L
20	Compliance	E006	07/31/2024	Specific Conductance @ 25C (field)	641	micromhos/cm
20	Compliance	E006	07/31/2024	Sulfate, total	77.0	mg/L
20	Compliance	E006	07/31/2024	Temperature	13.1	degrees C
20	Compliance	E006	07/31/2024	Thallium, total	0.00057 U	mg/L
20	Compliance	E006	07/31/2024	Total Dissolved Solids	390	mg/L
20	Compliance	E006	07/31/2024	Turbidity, field	1.89	NTU
34	Compliance	E006	--	Antimony, total	NS ⁷	mg/L
34	Compliance	E006	--	Arsenic, total	NS ⁷	mg/L
34	Compliance	E006	--	Barium, total	NS ⁷	mg/L
34	Compliance	E006	--	Beryllium, total	NS ⁷	mg/L
34	Compliance	E006	--	Boron, total	NS ⁷	mg/L
34	Compliance	E006	--	Cadmium, total	NS ⁷	mg/L
34	Compliance	E006	--	Calcium, total	NS ⁷	mg/L
34	Compliance	E006	--	Chloride, total	NS ⁷	mg/L
34	Compliance	E006	--	Chromium, total	NS ⁷	mg/L
34	Compliance	E006	--	Cobalt, total	NS ⁷	mg/L
34	Compliance	E006	--	Dissolved Oxygen	NS ⁷	mg/L
34	Compliance	E006	--	Fluoride, total	NS ⁷	mg/L
34	Compliance	E006	--	Lead, total	NS ⁷	mg/L
34	Compliance	E006	--	Lithium, total	NS ⁷	mg/L
34	Compliance	E006	--	Mercury, total	NS ⁷	mg/L
34	Compliance	E006	--	Molybdenum, total	NS ⁷	mg/L
34	Compliance	E006	--	Oxidation Reduction Potential	NS ⁷	mV
34	Compliance	E006	--	pH (field)	NS ⁷	SU
34	Compliance	E006	--	Radium 226 + Radium 228, total	NS ⁷	pCi/L
34	Compliance	E006	--	Selenium, total	NS ⁷	mg/L
34	Compliance	E006	--	Specific Conductance @ 25C (field)	NS ⁷	micromhos/cm
34	Compliance	E006	--	Sulfate, total	NS ⁷	mg/L
34	Compliance	E006	--	Temperature	NS ⁷	degrees C
34	Compliance	E006	--	Thallium, total	NS ⁷	mg/L
34	Compliance	E006	--	Total Dissolved Solids	NS ⁷	mg/L
34	Compliance	E006	--	Turbidity, field	NS ⁷	NTU
36	Compliance	E006	--	Antimony, total	NS ²	mg/L
36	Compliance	E006	--	Arsenic, total	NS ²	mg/L
36	Compliance	E006	--	Barium, total	NS ²	mg/L
36	Compliance	E006	--	Beryllium, total	NS ²	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
36	Compliance	E006	--	Boron, total	NS ²	mg/L
36	Compliance	E006	--	Cadmium, total	NS ²	mg/L
36	Compliance	E006	--	Calcium, total	NS ²	mg/L
36	Compliance	E006	--	Chloride, total	NS ²	mg/L
36	Compliance	E006	--	Chromium, total	NS ²	mg/L
36	Compliance	E006	--	Cobalt, total	NS ²	mg/L
36	Compliance	E006	--	Dissolved Oxygen	NS ²	mg/L
36	Compliance	E006	--	Fluoride, total	NS ²	mg/L
36	Compliance	E006	--	Lead, total	NS ²	mg/L
36	Compliance	E006	--	Lithium, total	NS ²	mg/L
36	Compliance	E006	--	Mercury, total	NS ²	mg/L
36	Compliance	E006	--	Molybdenum, total	NS ²	mg/L
36	Compliance	E006	--	Oxidation Reduction Potential	NS ²	mV
36	Compliance	E006	--	pH (field)	NS ²	SU
36	Compliance	E006	--	Radium 226 + Radium 228, total	NS ²	pCi/L
36	Compliance	E006	--	Selenium, total	NS ²	mg/L
36	Compliance	E006	--	Specific Conductance @ 25C (field)	NS ²	micromhos/cm
36	Compliance	E006	--	Sulfate, total	NS ²	mg/L
36	Compliance	E006	--	Temperature	NS ²	degrees C
36	Compliance	E006	--	Thallium, total	NS ²	mg/L
36	Compliance	E006	--	Total Dissolved Solids	NS ²	mg/L
36	Compliance	E006	--	Turbidity, field	NS ²	NTU
37	Compliance	E006	--	Antimony, total	NS ²	mg/L
37	Compliance	E006	--	Arsenic, total	NS ²	mg/L
37	Compliance	E006	--	Barium, total	NS ²	mg/L
37	Compliance	E006	--	Beryllium, total	NS ²	mg/L
37	Compliance	E006	--	Boron, total	NS ²	mg/L
37	Compliance	E006	--	Cadmium, total	NS ²	mg/L
37	Compliance	E006	--	Calcium, total	NS ²	mg/L
37	Compliance	E006	--	Chloride, total	NS ²	mg/L
37	Compliance	E006	--	Chromium, total	NS ²	mg/L
37	Compliance	E006	--	Cobalt, total	NS ²	mg/L
37	Compliance	E006	--	Dissolved Oxygen	NS ²	mg/L
37	Compliance	E006	--	Fluoride, total	NS ²	mg/L
37	Compliance	E006	--	Lead, total	NS ²	mg/L
37	Compliance	E006	--	Lithium, total	NS ²	mg/L
37	Compliance	E006	--	Mercury, total	NS ²	mg/L
37	Compliance	E006	--	Molybdenum, total	NS ²	mg/L
37	Compliance	E006	--	Oxidation Reduction Potential	NS ²	mV
37	Compliance	E006	--	pH (field)	NS ²	SU
37	Compliance	E006	--	Radium 226 + Radium 228, total	NS ²	pCi/L
37	Compliance	E006	--	Selenium, total	NS ²	mg/L
37	Compliance	E006	--	Specific Conductance @ 25C (field)	NS ²	micromhos/cm
37	Compliance	E006	--	Sulfate, total	NS ²	mg/L
37	Compliance	E006	--	Temperature	NS ²	degrees C
37	Compliance	E006	--	Thallium, total	NS ²	mg/L

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NORTH ASH POND AND OLD EAST ASH POND
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
37	Compliance	E006	--	Total Dissolved Solids	NS ²	mg/L
37	Compliance	E006	--	Turbidity, field	NS ²	NTU
38	Compliance	E006	07/30/2024	Antimony, total	0.0013 U	mg/L
38	Compliance	E006	07/30/2024	Arsenic, total	0.0300	mg/L
38	Compliance	E006	07/30/2024	Barium, total	0.210	mg/L
38	Compliance	E006	07/30/2024	Beryllium, total	0.00053 U	mg/L
38	Compliance	E006	07/30/2024	Boron, total	0.460 J+	mg/L
38	Compliance	E006	07/30/2024	Cadmium, total	0.00017 U	mg/L
38	Compliance	E006	07/30/2024	Calcium, total	74.0	mg/L
38	Compliance	E006	07/30/2024	Chloride, total	15.0	mg/L
38	Compliance	E006	07/30/2024	Chromium, total	0.0011 U	mg/L
38	Compliance	E006	07/30/2024	Cobalt, total	0.0004 U	mg/L
38	Compliance	E006	07/30/2024	Dissolved Oxygen	0.130	mg/L
38	Compliance	E006	07/30/2024	Fluoride, total	0.370	mg/L
38	Compliance	E006	07/30/2024	Lead, total	0.0005 UJ	mg/L
38	Compliance	E006	07/30/2024	Lithium, total	0.003 J	mg/L
38	Compliance	E006	07/30/2024	Mercury, total	0.000076 U	mg/L
38	Compliance	E006	07/30/2024	Molybdenum, total	0.0025 U	mg/L
38	Compliance	E006	07/30/2024	Oxidation Reduction Potential	-118	mV
38	Compliance	E006	07/30/2024	pH (field)	7.0	SU
38	Compliance	E006	07/30/2024	Radium 226 + Radium 228, total	1.52	pCi/L
38	Compliance	E006	07/30/2024	Selenium, total	0.00098 U	mg/L
38	Compliance	E006	07/30/2024	Specific Conductance @ 25C (field)	939	micromhos/cm
38	Compliance	E006	07/30/2024	Sulfate, total	0.25 J	mg/L
38	Compliance	E006	07/30/2024	Temperature	15.2	degrees C
38	Compliance	E006	07/30/2024	Thallium, total	0.00057 U	mg/L
38	Compliance	E006	07/30/2024	Total Dissolved Solids	540	mg/L
38	Compliance	E006	07/30/2024	Turbidity, field	125	NTU
41	Compliance	E006	07/29/2024	Antimony, total	0.0013 U	mg/L
41	Compliance	E006	07/29/2024	Arsenic, total	0.0100	mg/L
41	Compliance	E006	07/29/2024	Barium, total	0.240	mg/L
41	Compliance	E006	07/29/2024	Beryllium, total	0.00053 U	mg/L
41	Compliance	E006	07/29/2024	Boron, total	3.40	mg/L
41	Compliance	E006	07/29/2024	Cadmium, total	0.00017 U	mg/L
41	Compliance	E006	07/29/2024	Calcium, total	86.0	mg/L
41	Compliance	E006	07/29/2024	Chloride, total	47.0	mg/L
41	Compliance	E006	07/29/2024	Chromium, total	0.0011 U	mg/L
41	Compliance	E006	07/29/2024	Cobalt, total	0.0004 U	mg/L
41	Compliance	E006	07/29/2024	Dissolved Oxygen	0.140	mg/L
41	Compliance	E006	07/29/2024	Fluoride, total	0.420	mg/L
41	Compliance	E006	07/29/2024	Lead, total	0.0005 UJ	mg/L
41	Compliance	E006	07/29/2024	Lithium, total	0.002 U	mg/L
41	Compliance	E006	07/29/2024	Mercury, total	0.000076 U	mg/L
41	Compliance	E006	07/29/2024	Molybdenum, total	0.0025 U	mg/L
41	Compliance	E006	07/29/2024	Oxidation Reduction Potential	-157	mV
41	Compliance	E006	07/29/2024	pH (field)	7.2	SU

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
41	Compliance	E006	07/29/2024	Radium 226 + Radium 228, total	1.18	pCi/L
41	Compliance	E006	07/29/2024	Selenium, total	0.00098 U	mg/L
41	Compliance	E006	07/29/2024	Specific Conductance @ 25C (field)	1,341	micromhos/cm
41	Compliance	E006	07/29/2024	Sulfate, total	0.21 U	mg/L
41	Compliance	E006	07/29/2024	Temperature	13.5	degrees C
41	Compliance	E006	07/29/2024	Thallium, total	0.00057 U	mg/L
41	Compliance	E006	07/29/2024	Total Dissolved Solids	620	mg/L
41	Compliance	E006	07/29/2024	Turbidity, field	9.42	NTU

Notes:
C = Celsius
cm = centimeter
mg/L = milligrams per liter
Missing Code (if applicable):
NR¹ = Select parameters were not analyzed.
NS¹ = This well has been, or will be, abandoned; therefore, a sample was not collected.
NS² = Well either needs or was undergoing maintenance, therefore, a sample was not collected.
NS³ = A sample was not collected because the location was inaccessible.
NS⁴ = The location could not be found, therefore a sample was not collected.
NS⁵ = A sample was not collected because of damage to the well.
NS⁶ = A sample was not collected because of pump issues.
NS⁷ = A sample was not collected because the well was either dry or was purged dry and did not recover.
PM¹ = Select parameters were not analyzed as the well purged dry during sample collection and did not sufficiently recover to sample for all parameters.
mV = millivolts
NTU = Nephelometric Turbidity Units
pCi/L = picocuries per liter
SU = Standard Units
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+ = The result is an estimated quantity, but the result may be biased high.
U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.
UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
21	Background	E007	10/23/2024	Antimony, total	0.0013 U	mg/L
21	Background	E007	10/23/2024	Arsenic, total	0.0630	mg/L
21	Background	E007	10/23/2024	Barium, total	0.110	mg/L
21	Background	E007	10/23/2024	Beryllium, total	0.00053 U	mg/L
21	Background	E007	10/23/2024	Boron, total	0.870	mg/L
21	Background	E007	10/23/2024	Cadmium, total	0.00017 U	mg/L
21	Background	E007	10/23/2024	Calcium, total	59.0	mg/L
21	Background	E007	10/23/2024	Chloride, total	1.50 J+	mg/L
21	Background	E007	10/23/2024	Chromium, total	0.0011 U	mg/L
21	Background	E007	10/23/2024	Cobalt, total	0.0004 U	mg/L
21	Background	E007	10/23/2024	Dissolved Oxygen	1.10	mg/L
21	Background	E007	10/23/2024	Fluoride, total	1.10	mg/L
21	Background	E007	10/23/2024	Lead, total	0.00019 U	mg/L
21	Background	E007	10/23/2024	Lithium, total	0.002 U	mg/L
21	Background	E007	10/23/2024	Mercury, total	0.000076 UJ	mg/L
21	Background	E007	10/23/2024	Molybdenum, total	0.0049 J	mg/L
21	Background	E007	10/23/2024	Oxidation Reduction Potential	138	mV
21	Background	E007	10/23/2024	pH (field)	7.6	SU
21	Background	E007	10/23/2024	Radium 226 + Radium 228, total	0.327	pCi/L
21	Background	E007	10/23/2024	Selenium, total	0.00098 U	mg/L
21	Background	E007	10/23/2024	Specific Conductance @ 25C (field)	600	micromhos/cm
21	Background	E007	10/23/2024	Sulfate, total	3.60 J	mg/L
21	Background	E007	10/23/2024	Temperature	14.2	degrees C
21	Background	E007	10/23/2024	Thallium, total	0.00057 U	mg/L
21	Background	E007	10/23/2024	Total Dissolved Solids	400	mg/L
21	Background	E007	10/23/2024	Turbidity, field	7.71	NTU
42	Background	E007	10/22/2024	Antimony, total	0.0013 U	mg/L
42	Background	E007	10/22/2024	Arsenic, total	0.0190	mg/L
42	Background	E007	10/22/2024	Barium, total	0.170	mg/L
42	Background	E007	10/22/2024	Beryllium, total	0.00053 U	mg/L
42	Background	E007	10/22/2024	Boron, total	0.610	mg/L
42	Background	E007	10/22/2024	Cadmium, total	0.00017 U	mg/L
42	Background	E007	10/22/2024	Calcium, total	88.0	mg/L
42	Background	E007	10/22/2024	Chloride, total	16.0	mg/L
42	Background	E007	10/22/2024	Chromium, total	0.0011 U	mg/L
42	Background	E007	10/22/2024	Cobalt, total	0.0004 U	mg/L
42	Background	E007	10/22/2024	Dissolved Oxygen	1.22	mg/L
42	Background	E007	10/22/2024	Fluoride, total	0.520	mg/L
42	Background	E007	10/22/2024	Lead, total	0.00019 U	mg/L
42	Background	E007	10/22/2024	Lithium, total	0.002 U	mg/L
42	Background	E007	10/22/2024	Mercury, total	0.000076 U	mg/L
42	Background	E007	10/22/2024	Molybdenum, total	0.0025 U	mg/L
42	Background	E007	10/22/2024	Oxidation Reduction Potential	145	mV
42	Background	E007	10/22/2024	pH (field)	7.7	SU
42	Background	E007	10/22/2024	Radium 226 + Radium 228, total	0.351	pCi/L
42	Background	E007	10/22/2024	Selenium, total	0.00098 U	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
42	Background	E007	10/22/2024	Specific Conductance @ 25C (field)	857	micromhos/cm
42	Background	E007	10/22/2024	Sulfate, total	41.0	mg/L
42	Background	E007	10/22/2024	Temperature	11.8	degrees C
42	Background	E007	10/22/2024	Thallium, total	0.00057 U	mg/L
42	Background	E007	10/22/2024	Total Dissolved Solids	500	mg/L
42	Background	E007	10/22/2024	Turbidity, field	7.19	NTU
43	Background	E007	10/22/2024	Antimony, total	0.0013 U	mg/L
43	Background	E007	10/22/2024	Arsenic, total	0.0110	mg/L
43	Background	E007	10/22/2024	Barium, total	0.430	mg/L
43	Background	E007	10/22/2024	Beryllium, total	0.00053 U	mg/L
43	Background	E007	10/22/2024	Boron, total	1.10	mg/L
43	Background	E007	10/22/2024	Cadmium, total	0.00017 U	mg/L
43	Background	E007	10/22/2024	Calcium, total	78.0	mg/L
43	Background	E007	10/22/2024	Chloride, total	66.0	mg/L
43	Background	E007	10/22/2024	Chromium, total	0.0011 J	mg/L
43	Background	E007	10/22/2024	Cobalt, total	0.0004 U	mg/L
43	Background	E007	10/22/2024	Dissolved Oxygen	0.0900	mg/L
43	Background	E007	10/22/2024	Fluoride, total	0.460	mg/L
43	Background	E007	10/22/2024	Lead, total	0.000560	mg/L
43	Background	E007	10/22/2024	Lithium, total	0.00860	mg/L
43	Background	E007	10/22/2024	Mercury, total	0.000076 U	mg/L
43	Background	E007	10/22/2024	Molybdenum, total	0.0025 U	mg/L
43	Background	E007	10/22/2024	Oxidation Reduction Potential	-148	mV
43	Background	E007	10/22/2024	pH (field)	7.3	SU
43	Background	E007	10/22/2024	Radium 226 + Radium 228, total	0.637	pCi/L
43	Background	E007	10/22/2024	Selenium, total	0.00098 U	mg/L
43	Background	E007	10/22/2024	Specific Conductance @ 25C (field)	987	micromhos/cm
43	Background	E007	10/22/2024	Sulfate, total	20.0	mg/L
43	Background	E007	10/22/2024	Temperature	12.6	degrees C
43	Background	E007	10/22/2024	Thallium, total	0.00057 U	mg/L
43	Background	E007	10/22/2024	Total Dissolved Solids	600	mg/L
43	Background	E007	10/22/2024	Turbidity, field	8.45	NTU
101	Background	E007	10/23/2024	Antimony, total	0.0013 U	mg/L
101	Background	E007	10/23/2024	Arsenic, total	0.0580	mg/L
101	Background	E007	10/23/2024	Barium, total	0.130	mg/L
101	Background	E007	10/23/2024	Beryllium, total	0.00053 U	mg/L
101	Background	E007	10/23/2024	Boron, total	2.30	mg/L
101	Background	E007	10/23/2024	Cadmium, total	0.00017 U	mg/L
101	Background	E007	10/23/2024	Calcium, total	65.0	mg/L
101	Background	E007	10/23/2024	Chloride, total	11.0	mg/L
101	Background	E007	10/23/2024	Chromium, total	0.0011 U	mg/L
101	Background	E007	10/23/2024	Cobalt, total	0.0004 U	mg/L
101	Background	E007	10/23/2024	Dissolved Oxygen	0.490	mg/L
101	Background	E007	10/23/2024	Fluoride, total	0.810	mg/L
101	Background	E007	10/23/2024	Lead, total	0.0002 J	mg/L
101	Background	E007	10/23/2024	Lithium, total	0.00710	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
101	Background	E007	10/23/2024	Mercury, total	0.000076 U	mg/L
101	Background	E007	10/23/2024	Molybdenum, total	0.0025 U	mg/L
101	Background	E007	10/23/2024	Oxidation Reduction Potential	144	mV
101	Background	E007	10/23/2024	pH (field)	7.6	SU
101	Background	E007	10/23/2024	Radium 226 + Radium 228, total	2.12	pCi/L
101	Background	E007	10/23/2024	Selenium, total	0.00098 U	mg/L
101	Background	E007	10/23/2024	Specific Conductance @ 25C (field)	814	micromhos/cm
101	Background	E007	10/23/2024	Sulfate, total	35.0	mg/L
101	Background	E007	10/23/2024	Temperature	13.7	degrees C
101	Background	E007	10/23/2024	Thallium, total	0.00057 U	mg/L
101	Background	E007	10/23/2024	Total Dissolved Solids	540	mg/L
101	Background	E007	10/23/2024	Turbidity, field	320	NTU
103	Background	E007	10/23/2024	Antimony, total	0.0013 U	mg/L
103	Background	E007	10/23/2024	Arsenic, total	0.00098 J	mg/L
103	Background	E007	10/23/2024	Barium, total	0.0180	mg/L
103	Background	E007	10/23/2024	Beryllium, total	0.00053 U	mg/L
103	Background	E007	10/23/2024	Boron, total	0.410	mg/L
103	Background	E007	10/23/2024	Cadmium, total	0.00017 U	mg/L
103	Background	E007	10/23/2024	Calcium, total	220	mg/L
103	Background	E007	10/23/2024	Chloride, total	6.00	mg/L
103	Background	E007	10/23/2024	Chromium, total	0.0011 U	mg/L
103	Background	E007	10/23/2024	Cobalt, total	0.00500	mg/L
103	Background	E007	10/23/2024	Dissolved Oxygen	4.84	mg/L
103	Background	E007	10/23/2024	Fluoride, total	0.240	mg/L
103	Background	E007	10/23/2024	Lead, total	0.00019 U	mg/L
103	Background	E007	10/23/2024	Lithium, total	0.0720	mg/L
103	Background	E007	10/23/2024	Mercury, total	0.000076 U	mg/L
103	Background	E007	10/23/2024	Molybdenum, total	0.00640	mg/L
103	Background	E007	10/23/2024	Oxidation Reduction Potential	103	mV
103	Background	E007	10/23/2024	pH (field)	7.1	SU
103	Background	E007	10/23/2024	Radium 226 + Radium 228, total	1.03	pCi/L
103	Background	E007	10/23/2024	Selenium, total	0.00098 U	mg/L
103	Background	E007	10/23/2024	Specific Conductance @ 25C (field)	1,882	micromhos/cm
103	Background	E007	10/23/2024	Sulfate, total	950	mg/L
103	Background	E007	10/23/2024	Temperature	15.0	degrees C
103	Background	E007	10/23/2024	Thallium, total	0.00057 U	mg/L
103	Background	E007	10/23/2024	Total Dissolved Solids	1,900	mg/L
103	Background	E007	10/23/2024	Turbidity, field	7.72	NTU
02	Compliance	E007	10/23/2024	Antimony, total	0.0013 U	mg/L
02	Compliance	E007	10/23/2024	Arsenic, total	0.00900	mg/L
02	Compliance	E007	10/23/2024	Barium, total	0.210	mg/L
02	Compliance	E007	10/23/2024	Beryllium, total	0.00053 U	mg/L
02	Compliance	E007	10/23/2024	Boron, total	0.410	mg/L
02	Compliance	E007	10/23/2024	Cadmium, total	0.00017 U	mg/L
02	Compliance	E007	10/23/2024	Calcium, total	90.0	mg/L
02	Compliance	E007	10/23/2024	Chloride, total	45.0	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
02	Compliance	E007	10/23/2024	Chromium, total	0.00670	mg/L
02	Compliance	E007	10/23/2024	Cobalt, total	0.00066 J	mg/L
02	Compliance	E007	10/23/2024	Dissolved Oxygen	0.100	mg/L
02	Compliance	E007	10/23/2024	Fluoride, total	0.530	mg/L
02	Compliance	E007	10/23/2024	Lead, total	0.00180	mg/L
02	Compliance	E007	10/23/2024	Lithium, total	0.004 J	mg/L
02	Compliance	E007	10/23/2024	Mercury, total	0.000076 U	mg/L
02	Compliance	E007	10/23/2024	Molybdenum, total	0.0025 U	mg/L
02	Compliance	E007	10/23/2024	Oxidation Reduction Potential	-154	mV
02	Compliance	E007	10/23/2024	pH (field)	7.8	SU
02	Compliance	E007	10/23/2024	Radium 226 + Radium 228, total	1.21	pCi/L
02	Compliance	E007	10/23/2024	Selenium, total	0.00098 U	mg/L
02	Compliance	E007	10/23/2024	Specific Conductance @ 25C (field)	832	micromhos/cm
02	Compliance	E007	10/23/2024	Sulfate, total	46.0	mg/L
02	Compliance	E007	10/23/2024	Temperature	15.0	degrees C
02	Compliance	E007	10/23/2024	Thallium, total	0.00057 U	mg/L
02	Compliance	E007	10/23/2024	Total Dissolved Solids	630	mg/L
02	Compliance	E007	10/23/2024	Turbidity, field	57.4	NTU
03R	Compliance	E007	10/22/2024	Antimony, total	0.0013 U	mg/L
03R	Compliance	E007	10/22/2024	Arsenic, total	0.00760 J	mg/L
03R	Compliance	E007	10/22/2024	Barium, total	0.330	mg/L
03R	Compliance	E007	10/22/2024	Beryllium, total	0.00053 U	mg/L
03R	Compliance	E007	10/22/2024	Boron, total	28.0	mg/L
03R	Compliance	E007	10/22/2024	Cadmium, total	0.0005 UJ	mg/L
03R	Compliance	E007	10/22/2024	Calcium, total	190	mg/L
03R	Compliance	E007	10/22/2024	Chloride, total	21.0	mg/L
03R	Compliance	E007	10/22/2024	Chromium, total	0.0025 J	mg/L
03R	Compliance	E007	10/22/2024	Cobalt, total	0.00081 J	mg/L
03R	Compliance	E007	10/22/2024	Dissolved Oxygen	0.130	mg/L
03R	Compliance	E007	10/22/2024	Fluoride, total	0.400	mg/L
03R	Compliance	E007	10/22/2024	Lead, total	0.00140 J	mg/L
03R	Compliance	E007	10/22/2024	Lithium, total	0.00550	mg/L
03R	Compliance	E007	10/22/2024	Mercury, total	0.000076 U	mg/L
03R	Compliance	E007	10/22/2024	Molybdenum, total	0.370	mg/L
03R	Compliance	E007	10/22/2024	Oxidation Reduction Potential	-140	mV
03R	Compliance	E007	10/22/2024	pH (field)	7.4	SU
03R	Compliance	E007	10/22/2024	Radium 226 + Radium 228, total	2.21	pCi/L
03R	Compliance	E007	10/22/2024	Selenium, total	0.00098 U	mg/L
03R	Compliance	E007	10/22/2024	Specific Conductance @ 25C (field)	1,330	micromhos/cm
03R	Compliance	E007	10/22/2024	Sulfate, total	530	mg/L
03R	Compliance	E007	10/22/2024	Temperature	13.6	degrees C
03R	Compliance	E007	10/22/2024	Thallium, total	0.00057 U	mg/L
03R	Compliance	E007	10/22/2024	Total Dissolved Solids	1,200	mg/L
03R	Compliance	E007	10/22/2024	Turbidity, field	16.7	NTU
04	Compliance	E007	10/22/2024	Antimony, total	0.0013 U	mg/L
04	Compliance	E007	10/22/2024	Arsenic, total	0.00570	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 4, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
04	Compliance	E007	10/22/2024	Barium, total	0.240	mg/L
04	Compliance	E007	10/22/2024	Beryllium, total	0.00053 U	mg/L
04	Compliance	E007	10/22/2024	Boron, total	9.90	mg/L
04	Compliance	E007	10/22/2024	Cadmium, total	0.00017 U	mg/L
04	Compliance	E007	10/22/2024	Calcium, total	72.0	mg/L
04	Compliance	E007	10/22/2024	Chloride, total	9.40 J+	mg/L
04	Compliance	E007	10/22/2024	Chromium, total	0.0011 U	mg/L
04	Compliance	E007	10/22/2024	Cobalt, total	0.00051 J	mg/L
04	Compliance	E007	10/22/2024	Dissolved Oxygen	0.0800	mg/L
04	Compliance	E007	10/22/2024	Fluoride, total	0.320	mg/L
04	Compliance	E007	10/22/2024	Lead, total	0.00019 U	mg/L
04	Compliance	E007	10/22/2024	Lithium, total	0.0470	mg/L
04	Compliance	E007	10/22/2024	Mercury, total	0.000076 U	mg/L
04	Compliance	E007	10/22/2024	Molybdenum, total	0.0410	mg/L
04	Compliance	E007	10/22/2024	Oxidation Reduction Potential	-164	mV
04	Compliance	E007	10/22/2024	pH (field)	7.6	SU
04	Compliance	E007	10/22/2024	Radium 226 + Radium 228, total	1.44	pCi/L
04	Compliance	E007	10/22/2024	Selenium, total	0.00098 U	mg/L
04	Compliance	E007	10/22/2024	Specific Conductance @ 25C (field)	430	micromhos/cm
04	Compliance	E007	10/22/2024	Sulfate, total	6.20	mg/L
04	Compliance	E007	10/22/2024	Temperature	15.7	degrees C
04	Compliance	E007	10/22/2024	Thallium, total	0.00057 U	mg/L
04	Compliance	E007	10/22/2024	Total Dissolved Solids	370	mg/L
04	Compliance	E007	10/22/2024	Turbidity, field	0.790	NTU
05	Compliance	E007	10/22/2024	Antimony, total	0.0013 U	mg/L
05	Compliance	E007	10/22/2024	Arsenic, total	0.00032 J	mg/L
05	Compliance	E007	10/22/2024	Barium, total	0.0310	mg/L
05	Compliance	E007	10/22/2024	Beryllium, total	0.00053 U	mg/L
05	Compliance	E007	10/22/2024	Boron, total	15.0	mg/L
05	Compliance	E007	10/22/2024	Cadmium, total	0.00017 U	mg/L
05	Compliance	E007	10/22/2024	Calcium, total	130	mg/L
05	Compliance	E007	10/22/2024	Chloride, total	6.40 J+	mg/L
05	Compliance	E007	10/22/2024	Chromium, total	0.0011 U	mg/L
05	Compliance	E007	10/22/2024	Cobalt, total	0.00083 J	mg/L
05	Compliance	E007	10/22/2024	Dissolved Oxygen	0.110	mg/L
05	Compliance	E007	10/22/2024	Fluoride, total	0.620	mg/L
05	Compliance	E007	10/22/2024	Lead, total	0.00019 U	mg/L
05	Compliance	E007	10/22/2024	Lithium, total	0.0910	mg/L
05	Compliance	E007	10/22/2024	Mercury, total	0.000076 U	mg/L
05	Compliance	E007	10/22/2024	Molybdenum, total	0.0490	mg/L
05	Compliance	E007	10/22/2024	Oxidation Reduction Potential	-3.50	mV
05	Compliance	E007	10/22/2024	pH (field)	7.4	SU
05	Compliance	E007	10/22/2024	Radium 226 + Radium 228, total	1.03	pCi/L
05	Compliance	E007	10/22/2024	Selenium, total	0.00098 U	mg/L
05	Compliance	E007	10/22/2024	Specific Conductance @ 25C (field)	738	micromhos/cm
05	Compliance	E007	10/22/2024	Sulfate, total	220	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
05	Compliance	E007	10/22/2024	Temperature	15.1	degrees C
05	Compliance	E007	10/22/2024	Thallium, total	0.00057 U	mg/L
05	Compliance	E007	10/22/2024	Total Dissolved Solids	640	mg/L
05	Compliance	E007	10/22/2024	Turbidity, field	1.15	NTU
07R	Compliance	E007	10/23/2024	Antimony, total	0.0013 U	mg/L
07R	Compliance	E007	10/23/2024	Arsenic, total	0.0200	mg/L
07R	Compliance	E007	10/23/2024	Barium, total	0.0240	mg/L
07R	Compliance	E007	10/23/2024	Beryllium, total	0.00053 U	mg/L
07R	Compliance	E007	10/23/2024	Boron, total	51.0	mg/L
07R	Compliance	E007	10/23/2024	Cadmium, total	0.00017 U	mg/L
07R	Compliance	E007	10/23/2024	Calcium, total	740	mg/L
07R	Compliance	E007	10/23/2024	Chloride, total	4.30	mg/L
07R	Compliance	E007	10/23/2024	Chromium, total	0.0011 U	mg/L
07R	Compliance	E007	10/23/2024	Cobalt, total	0.00072 J	mg/L
07R	Compliance	E007	10/23/2024	Dissolved Oxygen	0.730	mg/L
07R	Compliance	E007	10/23/2024	Fluoride, total	0.092 J	mg/L
07R	Compliance	E007	10/23/2024	Lead, total	0.00019 U	mg/L
07R	Compliance	E007	10/23/2024	Lithium, total	0.640	mg/L
07R	Compliance	E007	10/23/2024	Mercury, total	0.000076 U	mg/L
07R	Compliance	E007	10/23/2024	Molybdenum, total	0.250	mg/L
07R	Compliance	E007	10/23/2024	Oxidation Reduction Potential	-78.9	mV
07R	Compliance	E007	10/23/2024	pH (field)	7.2	SU
07R	Compliance	E007	10/23/2024	Radium 226 + Radium 228, total	1.88	pCi/L
07R	Compliance	E007	10/23/2024	Selenium, total	0.0049 U	mg/L
07R	Compliance	E007	10/23/2024	Specific Conductance @ 25C (field)	2,577	micromhos/cm
07R	Compliance	E007	10/23/2024	Sulfate, total	1,700	mg/L
07R	Compliance	E007	10/23/2024	Temperature	16.5	degrees C
07R	Compliance	E007	10/23/2024	Thallium, total	0.00057 U	mg/L
07R	Compliance	E007	10/23/2024	Total Dissolved Solids	3,200	mg/L
07R	Compliance	E007	10/23/2024	Turbidity, field	3.18	NTU
08R	Compliance	E007	--	Antimony, total	NS ⁷	mg/L
08R	Compliance	E007	--	Arsenic, total	NS ⁷	mg/L
08R	Compliance	E007	--	Barium, total	NS ⁷	mg/L
08R	Compliance	E007	--	Beryllium, total	NS ⁷	mg/L
08R	Compliance	E007	--	Boron, total	NS ⁷	mg/L
08R	Compliance	E007	--	Cadmium, total	NS ⁷	mg/L
08R	Compliance	E007	--	Calcium, total	NS ⁷	mg/L
08R	Compliance	E007	--	Chloride, total	NS ⁷	mg/L
08R	Compliance	E007	--	Chromium, total	NS ⁷	mg/L
08R	Compliance	E007	--	Cobalt, total	NS ⁷	mg/L
08R	Compliance	E007	--	Dissolved Oxygen	NS ⁷	mg/L
08R	Compliance	E007	--	Fluoride, total	NS ⁷	mg/L
08R	Compliance	E007	--	Lead, total	NS ⁷	mg/L
08R	Compliance	E007	--	Lithium, total	NS ⁷	mg/L
08R	Compliance	E007	--	Mercury, total	NS ⁷	mg/L
08R	Compliance	E007	--	Molybdenum, total	NS ⁷	mg/L

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OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
08R	Compliance	E007	--	Oxidation Reduction Potential	NS ⁷	mV
08R	Compliance	E007	--	pH (field)	NS ⁷	SU
08R	Compliance	E007	--	Radium 226 + Radium 228, total	NS ⁷	pCi/L
08R	Compliance	E007	--	Selenium, total	NS ⁷	mg/L
08R	Compliance	E007	--	Specific Conductance @ 25C (field)	NS ⁷	micromhos/cm
08R	Compliance	E007	--	Sulfate, total	NS ⁷	mg/L
08R	Compliance	E007	--	Temperature	NS ⁷	degrees C
08R	Compliance	E007	--	Thallium, total	NS ⁷	mg/L
08R	Compliance	E007	--	Total Dissolved Solids	NS ⁷	mg/L
08R	Compliance	E007	--	Turbidity, field	NS ⁷	NTU
17	Compliance	E007	--	Antimony, total	NS ⁷	mg/L
17	Compliance	E007	--	Arsenic, total	NS ⁷	mg/L
17	Compliance	E007	--	Barium, total	NS ⁷	mg/L
17	Compliance	E007	--	Beryllium, total	NS ⁷	mg/L
17	Compliance	E007	--	Boron, total	NS ⁷	mg/L
17	Compliance	E007	--	Cadmium, total	NS ⁷	mg/L
17	Compliance	E007	--	Calcium, total	NS ⁷	mg/L
17	Compliance	E007	--	Chloride, total	NS ⁷	mg/L
17	Compliance	E007	--	Chromium, total	NS ⁷	mg/L
17	Compliance	E007	--	Cobalt, total	NS ⁷	mg/L
17	Compliance	E007	--	Dissolved Oxygen	NS ⁷	mg/L
17	Compliance	E007	--	Fluoride, total	NS ⁷	mg/L
17	Compliance	E007	--	Lead, total	NS ⁷	mg/L
17	Compliance	E007	--	Lithium, total	NS ⁷	mg/L
17	Compliance	E007	--	Mercury, total	NS ⁷	mg/L
17	Compliance	E007	--	Molybdenum, total	NS ⁷	mg/L
17	Compliance	E007	--	Oxidation Reduction Potential	NS ⁷	mV
17	Compliance	E007	--	pH (field)	NS ⁷	SU
17	Compliance	E007	--	Radium 226 + Radium 228, total	NS ⁷	pCi/L
17	Compliance	E007	--	Selenium, total	NS ⁷	mg/L
17	Compliance	E007	--	Specific Conductance @ 25C (field)	NS ⁷	micromhos/cm
17	Compliance	E007	--	Sulfate, total	NS ⁷	mg/L
17	Compliance	E007	--	Temperature	NS ⁷	degrees C
17	Compliance	E007	--	Thallium, total	NS ⁷	mg/L
17	Compliance	E007	--	Total Dissolved Solids	NS ⁷	mg/L
17	Compliance	E007	--	Turbidity, field	NS ⁷	NTU
20	Compliance	E007	10/23/2024	Antimony, total	0.0013 U	mg/L
20	Compliance	E007	10/23/2024	Arsenic, total	0.00170	mg/L
20	Compliance	E007	10/23/2024	Barium, total	0.0230	mg/L
20	Compliance	E007	10/23/2024	Beryllium, total	0.00053 U	mg/L
20	Compliance	E007	10/23/2024	Boron, total	2.20	mg/L
20	Compliance	E007	10/23/2024	Cadmium, total	0.00017 U	mg/L
20	Compliance	E007	10/23/2024	Calcium, total	99.0	mg/L
20	Compliance	E007	10/23/2024	Chloride, total	4.30	mg/L
20	Compliance	E007	10/23/2024	Chromium, total	0.0011 U	mg/L
20	Compliance	E007	10/23/2024	Cobalt, total	0.00045 J	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
20	Compliance	E007	10/23/2024	Dissolved Oxygen	0.120	mg/L
20	Compliance	E007	10/23/2024	Fluoride, total	0.084 J	mg/L
20	Compliance	E007	10/23/2024	Lead, total	0.00019 U	mg/L
20	Compliance	E007	10/23/2024	Lithium, total	0.0260	mg/L
20	Compliance	E007	10/23/2024	Mercury, total	0.000076 U	mg/L
20	Compliance	E007	10/23/2024	Molybdenum, total	0.0025 U	mg/L
20	Compliance	E007	10/23/2024	Oxidation Reduction Potential	-25.8	mV
20	Compliance	E007	10/23/2024	pH (field)	7.1	SU
20	Compliance	E007	10/23/2024	Radium 226 + Radium 228, total	0.0945	pCi/L
20	Compliance	E007	10/23/2024	Selenium, total	0.00098 U	mg/L
20	Compliance	E007	10/23/2024	Specific Conductance @ 25C (field)	626	micromhos/cm
20	Compliance	E007	10/23/2024	Sulfate, total	93.0	mg/L
20	Compliance	E007	10/23/2024	Temperature	14.1	degrees C
20	Compliance	E007	10/23/2024	Thallium, total	0.00057 U	mg/L
20	Compliance	E007	10/23/2024	Total Dissolved Solids	480	mg/L
20	Compliance	E007	10/23/2024	Turbidity, field	7.62	NTU
34	Compliance	E007	10/24/2024	Antimony, total	0.0013 U	mg/L
34	Compliance	E007	10/24/2024	Arsenic, total	0.0280	mg/L
34	Compliance	E007	10/24/2024	Barium, total	0.180	mg/L
34	Compliance	E007	10/24/2024	Beryllium, total	0.00053 U	mg/L
34	Compliance	E007	10/24/2024	Boron, total	0.570	mg/L
34	Compliance	E007	10/24/2024	Cadmium, total	0.00017 U	mg/L
34	Compliance	E007	10/24/2024	Calcium, total	71.0	mg/L
34	Compliance	E007	10/24/2024	Chloride, total	31.0	mg/L
34	Compliance	E007	10/24/2024	Chromium, total	0.00510	mg/L
34	Compliance	E007	10/24/2024	Cobalt, total	0.00120	mg/L
34	Compliance	E007	10/24/2024	Dissolved Oxygen	0.710	mg/L
34	Compliance	E007	10/24/2024	Fluoride, total	0.620	mg/L
34	Compliance	E007	10/24/2024	Lead, total	0.00250	mg/L
34	Compliance	E007	10/24/2024	Lithium, total	0.00530	mg/L
34	Compliance	E007	10/24/2024	Mercury, total	0.000076 U	mg/L
34	Compliance	E007	10/24/2024	Molybdenum, total	0.0025 U	mg/L
34	Compliance	E007	10/24/2024	Oxidation Reduction Potential	-127	mV
34	Compliance	E007	10/24/2024	pH (field)	7.2	SU
34	Compliance	E007	10/24/2024	Radium 226 + Radium 228, total	0.741	pCi/L
34	Compliance	E007	10/24/2024	Selenium, total	0.00098 U	mg/L
34	Compliance	E007	10/24/2024	Specific Conductance @ 25C (field)	814	micromhos/cm
34	Compliance	E007	10/24/2024	Sulfate, total	0.21 U	mg/L
34	Compliance	E007	10/24/2024	Temperature	11.9	degrees C
34	Compliance	E007	10/24/2024	Thallium, total	0.00057 U	mg/L
34	Compliance	E007	10/24/2024	Total Dissolved Solids	520	mg/L
34	Compliance	E007	10/24/2024	Turbidity, field	31.4	NTU
36	Compliance	E007	10/23/2024	Antimony, total	0.0013 U	mg/L
36	Compliance	E007	10/23/2024	Arsenic, total	0.0041 J	mg/L
36	Compliance	E007	10/23/2024	Barium, total	0.0700	mg/L
36	Compliance	E007	10/23/2024	Beryllium, total	0.00053 U	mg/L

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
36	Compliance	E007	10/23/2024	Boron, total	16.0	mg/L
36	Compliance	E007	10/23/2024	Cadmium, total	0.00017 U	mg/L
36	Compliance	E007	10/23/2024	Calcium, total	430	mg/L
36	Compliance	E007	10/23/2024	Chloride, total	13.0	mg/L
36	Compliance	E007	10/23/2024	Chromium, total	0.0011 U	mg/L
36	Compliance	E007	10/23/2024	Cobalt, total	0.00063 J	mg/L
36	Compliance	E007	10/23/2024	Dissolved Oxygen	0.120	mg/L
36	Compliance	E007	10/23/2024	Fluoride, total	0.190	mg/L
36	Compliance	E007	10/23/2024	Lead, total	0.00093 U	mg/L
36	Compliance	E007	10/23/2024	Lithium, total	0.210	mg/L
36	Compliance	E007	10/23/2024	Mercury, total	0.000076 U	mg/L
36	Compliance	E007	10/23/2024	Molybdenum, total	0.120	mg/L
36	Compliance	E007	10/23/2024	Oxidation Reduction Potential	-117	mV
36	Compliance	E007	10/23/2024	pH (field)	7.2	SU
36	Compliance	E007	10/23/2024	Radium 226 + Radium 228, total	0.887	pCi/L
36	Compliance	E007	10/23/2024	Selenium, total	0.0049 U	mg/L
36	Compliance	E007	10/23/2024	Specific Conductance @ 25C (field)	1,759	micromhos/cm
36	Compliance	E007	10/23/2024	Sulfate, total	1,100	mg/L
36	Compliance	E007	10/23/2024	Temperature	14.7	degrees C
36	Compliance	E007	10/23/2024	Thallium, total	0.0029 U	mg/L
36	Compliance	E007	10/23/2024	Total Dissolved Solids	2,000	mg/L
36	Compliance	E007	10/23/2024	Turbidity, field	7.32	NTU
37	Compliance	E007	10/23/2024	Antimony, total	0.0013 U	mg/L
37	Compliance	E007	10/23/2024	Arsenic, total	0.0400	mg/L
37	Compliance	E007	10/23/2024	Barium, total	0.350	mg/L
37	Compliance	E007	10/23/2024	Beryllium, total	0.00053 U	mg/L
37	Compliance	E007	10/23/2024	Boron, total	2.10	mg/L
37	Compliance	E007	10/23/2024	Cadmium, total	0.00017 U	mg/L
37	Compliance	E007	10/23/2024	Calcium, total	130	mg/L
37	Compliance	E007	10/23/2024	Chloride, total	40.0	mg/L
37	Compliance	E007	10/23/2024	Chromium, total	0.0011 U	mg/L
37	Compliance	E007	10/23/2024	Cobalt, total	0.0004 U	mg/L
37	Compliance	E007	10/23/2024	Dissolved Oxygen	0.0300	mg/L
37	Compliance	E007	10/23/2024	Fluoride, total	0.540	mg/L
37	Compliance	E007	10/23/2024	Lead, total	0.00019 U	mg/L
37	Compliance	E007	10/23/2024	Lithium, total	0.0023 J	mg/L
37	Compliance	E007	10/23/2024	Mercury, total	0.000076 U	mg/L
37	Compliance	E007	10/23/2024	Molybdenum, total	0.0025 U	mg/L
37	Compliance	E007	10/23/2024	Oxidation Reduction Potential	-146	mV
37	Compliance	E007	10/23/2024	pH (field)	7.1	SU
37	Compliance	E007	10/23/2024	Radium 226 + Radium 228, total	1.48	pCi/L
37	Compliance	E007	10/23/2024	Selenium, total	0.001 J	mg/L
37	Compliance	E007	10/23/2024	Specific Conductance @ 25C (field)	1,205	micromhos/cm
37	Compliance	E007	10/23/2024	Sulfate, total	290	mg/L
37	Compliance	E007	10/23/2024	Temperature	14.1	degrees C
37	Compliance	E007	10/23/2024	Thallium, total	0.00057 U	mg/L

TABLE 1.
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OAKWOOD, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
37	Compliance	E007	10/23/2024	Total Dissolved Solids	900	mg/L
37	Compliance	E007	10/23/2024	Turbidity, field	50.7	NTU
38	Compliance	E007	10/23/2024	Antimony, total	0.0013 U	mg/L
38	Compliance	E007	10/23/2024	Arsenic, total	0.0340	mg/L
38	Compliance	E007	10/23/2024	Barium, total	0.210	mg/L
38	Compliance	E007	10/23/2024	Beryllium, total	0.00053 U	mg/L
38	Compliance	E007	10/23/2024	Boron, total	0.530	mg/L
38	Compliance	E007	10/23/2024	Cadmium, total	0.00017 U	mg/L
38	Compliance	E007	10/23/2024	Calcium, total	74.0	mg/L
38	Compliance	E007	10/23/2024	Chloride, total	15.0	mg/L
38	Compliance	E007	10/23/2024	Chromium, total	0.0011 U	mg/L
38	Compliance	E007	10/23/2024	Cobalt, total	0.0004 U	mg/L
38	Compliance	E007	10/23/2024	Dissolved Oxygen	0.370	mg/L
38	Compliance	E007	10/23/2024	Fluoride, total	0.360	mg/L
38	Compliance	E007	10/23/2024	Lead, total	0.00019 U	mg/L
38	Compliance	E007	10/23/2024	Lithium, total	0.002 U	mg/L
38	Compliance	E007	10/23/2024	Mercury, total	0.000076 U	mg/L
38	Compliance	E007	10/23/2024	Molybdenum, total	0.0025 U	mg/L
38	Compliance	E007	10/23/2024	Oxidation Reduction Potential	140	mV
38	Compliance	E007	10/23/2024	pH (field)	7.2	SU
38	Compliance	E007	10/23/2024	Radium 226 + Radium 228, total	1.56	pCi/L
38	Compliance	E007	10/23/2024	Selenium, total	0.00098 U	mg/L
38	Compliance	E007	10/23/2024	Specific Conductance @ 25C (field)	909	micromhos/cm
38	Compliance	E007	10/23/2024	Sulfate, total	0.23 J	mg/L
38	Compliance	E007	10/23/2024	Temperature	13.7	degrees C
38	Compliance	E007	10/23/2024	Thallium, total	0.00057 U	mg/L
38	Compliance	E007	10/23/2024	Total Dissolved Solids	570	mg/L
38	Compliance	E007	10/23/2024	Turbidity, field	151	NTU
41	Compliance	E007	10/24/2024	Antimony, total	0.0013 U	mg/L
41	Compliance	E007	10/24/2024	Arsenic, total	0.0120	mg/L
41	Compliance	E007	10/24/2024	Barium, total	0.230	mg/L
41	Compliance	E007	10/24/2024	Beryllium, total	0.00053 U	mg/L
41	Compliance	E007	10/24/2024	Boron, total	3.00	mg/L
41	Compliance	E007	10/24/2024	Cadmium, total	0.00017 U	mg/L
41	Compliance	E007	10/24/2024	Calcium, total	85.0	mg/L
41	Compliance	E007	10/24/2024	Chloride, total	50.0	mg/L
41	Compliance	E007	10/24/2024	Chromium, total	0.0013 J	mg/L
41	Compliance	E007	10/24/2024	Cobalt, total	0.0004 U	mg/L
41	Compliance	E007	10/24/2024	Dissolved Oxygen	0.0500	mg/L
41	Compliance	E007	10/24/2024	Fluoride, total	0.420	mg/L
41	Compliance	E007	10/24/2024	Lead, total	0.00022 J	mg/L
41	Compliance	E007	10/24/2024	Lithium, total	0.002 U	mg/L
41	Compliance	E007	10/24/2024	Mercury, total	0.000076 U	mg/L
41	Compliance	E007	10/24/2024	Molybdenum, total	0.0025 U	mg/L
41	Compliance	E007	10/24/2024	Oxidation Reduction Potential	-136	mV
41	Compliance	E007	10/24/2024	pH (field)	7.2	SU

TABLE 1.
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Well ID	Well Type	Event	Date	Parameter	Result	Unit
41	Compliance	E007	10/24/2024	Radium 226 + Radium 228, total	1.4	pCi/L
41	Compliance	E007	10/24/2024	Selenium, total	0.00098 U	mg/L
41	Compliance	E007	10/24/2024	Specific Conductance @ 25C (field)	1,009	micromhos/cm
41	Compliance	E007	10/24/2024	Sulfate, total	0.21 U	mg/L
41	Compliance	E007	10/24/2024	Temperature	12.8	degrees C
41	Compliance	E007	10/24/2024	Thallium, total	0.00057 U	mg/L
41	Compliance	E007	10/24/2024	Total Dissolved Solids	680	mg/L
41	Compliance	E007	10/24/2024	Turbidity, field	4.49	NTU

Notes:

C = Celsius
cm = centimeter
Events:

E007 = Quarter 4, 2024 sampling event

mg/L = milligrams per liter

mV = millivolts

NTU = Nephelometric Turbidity Units

pCi/L = picocuries per liter

Result Code (if applicable):

- NR¹ = Parameter not analyzed.
- NS¹ = Well has been, or will be, abandoned; therefore, a sample was not collected.
- NS² = Well either needs or was undergoing maintenance; therefore, a sample was not collected.
- NS³ = The location was not accessible; therefore, a sample was not collected.
- NS⁴ = The location could not be found; therefore, a sample was not collected.
- NS⁵ = The location was damaged; therefore, a sample was not collected.
- NS⁶ = Sampling pump could not yield a sample.
- NS⁷ = Well was either dry or purged dry and did not recover sufficiently to yield adequate volume for a sample.
- NS⁸ = A sample was not collected.
- PM¹ = Parameter not analyzed as the well purged dry during sample collection and did not sufficiently recover to yield adequate sample volume for analysis.

Result qualifiers as defined in the United States Environmental Protection Agency’s *National Functional Guidelines for Inorganic Superfund Methods Data Review*, EPA 542-R-20-006. November 2020.:

- J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J+ = The result is an estimated quantity, but the result may be biased high.
- U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.
- UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
- SU = Standard Units

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
02	LGU	E004	Antimony, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
02	LGU	E004	Arsenic, total	mg/L	03/31/21 - 02/20/24	12	8	CI around mean	0.00557	0.0600	Background	No Exceedance
02	LGU	E004	Barium, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.193	2.0	Standard	No Exceedance
02	LGU	E004	Beryllium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
02	LGU	E004	Boron, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.306	2.45	Background	No Exceedance
02	LGU	E004	Cadmium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
02	LGU	E004	Chloride, total	mg/L	03/31/21 - 02/20/24	12	0	CB around linear reg	38.6	200	Standard	No Exceedance
02	LGU	E004	Chromium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.005	0.1	Standard	No Exceedance
02	LGU	E004	Cobalt, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.001	0.006	Standard	No Exceedance
02	LGU	E004	Fluoride, total	mg/L	03/31/21 - 02/20/24	12	8	CB around linear reg	0.497	4.0	Standard	No Exceedance
02	LGU	E004	Lead, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
02	LGU	E004	Lithium, total	mg/L	03/31/21 - 02/20/24	12	50	CI around mean	0.0029	0.04	Standard	No Exceedance
02	LGU	E004	Mercury, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
02	LGU	E004	Molybdenum, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.005	0.1	Standard	No Exceedance
02	LGU	E004	pH (field)	SU	03/31/21 - 02/20/24	12	0	CI around mean	7.4/7.8	6.5/9.0	Standard/Standard	No Exceedance
02	LGU	E004	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 02/20/24	11	0	CI around mean	0.485	5	Standard	No Exceedance
02	LGU	E004	Selenium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
02	LGU	E004	Sulfate, total	mg/L	03/31/21 - 02/20/24	12	0	CB around linear reg	-12.1	400	Standard	No Exceedance
02	LGU	E004	Thallium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.002	0.002	Standard	No Exceedance
02	LGU	E004	Total Dissolved Solids	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	558	1,200	Standard	No Exceedance
03R	LGU	E004	Antimony, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
03R	LGU	E004	Arsenic, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.00491	0.0600	Background	No Exceedance
03R	LGU	E004	Barium, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.287	2.0	Standard	No Exceedance
03R	LGU	E004	Beryllium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
03R	LGU	E004	Boron, total	mg/L	03/30/21 - 02/20/24	12	0	CI around median	19.1	2.45	Background	Exceedance
03R	LGU	E004	Cadmium, total	mg/L	03/30/21 - 02/20/24	12	75	CI around median	0.00051	0.005	Standard	No Exceedance
03R	LGU	E004	Chloride, total	mg/L	03/30/21 - 02/20/24	12	2	CI around mean	26	200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
03R	LGU	E004	Chromium, total	mg/L	03/30/21 - 02/20/24	12	83	CI around median	0.0015	0.1	Standard	No Exceedance
03R	LGU	E004	Cobalt, total	mg/L	03/30/21 - 02/20/24	12	83	CI around median	0.001	0.006	Standard	No Exceedance
03R	LGU	E004	Fluoride, total	mg/L	03/30/21 - 02/20/24	12	8	CI around mean	0.447	4.0	Standard	No Exceedance
03R	LGU	E004	Lead, total	mg/L	03/30/21 - 02/20/24	12	58	CI around median	0.001	0.0075	Standard	No Exceedance
03R	LGU	E004	Lithium, total	mg/L	03/30/21 - 02/20/24	12	92	CI around median	0.003	0.04	Standard	No Exceedance
03R	LGU	E004	Mercury, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
03R	LGU	E004	Molybdenum, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.185	0.1	Standard	Exceedance
03R	LGU	E004	pH (field)	SU	03/30/21 - 02/20/24	12	0	CI around mean	7.2/7.4	6.5/9.0	Standard/Standard	No Exceedance
03R	LGU	E004	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 02/20/24	10	0	CI around mean	0.928	5	Standard	No Exceedance
03R	LGU	E004	Selenium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
03R	LGU	E004	Sulfate, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	487	400	Standard	Exceedance
03R	LGU	E004	Thallium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.002	0.002	Standard	No Exceedance
03R	LGU	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	1,090	1,200	Standard	No Exceedance
04	UA	E004	Antimony, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
04	UA	E004	Arsenic, total	mg/L	03/30/21 - 02/21/24	12	8	CI around geomean	0.00541	0.0600	Background	No Exceedance
04	UA	E004	Barium, total	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	0.225	2.0	Standard	No Exceedance
04	UA	E004	Beryllium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
04	UA	E004	Boron, total	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	8.41	2.45	Background	Exceedance
04	UA	E004	Cadmium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
04	UA	E004	Chloride, total	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	10.4	200	Standard	No Exceedance
04	UA	E004	Chromium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.005	0.1	Standard	No Exceedance
04	UA	E004	Cobalt, total	mg/L	03/30/21 - 02/21/24	12	92	Most recent sample	0.001	0.006	Standard	No Exceedance
04	UA	E004	Fluoride, total	mg/L	03/30/21 - 02/21/24	12	8	CI around median	0.3	4.0	Standard	No Exceedance
04	UA	E004	Lead, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
04	UA	E004	Lithium, total	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	0.0461	0.04	Standard	Exceedance
04	UA	E004	Mercury, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
04	UA	E004	Molybdenum, total	mg/L	03/30/21 - 02/21/24	12	0	CB around linear reg	0.032	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
04	UA	E004	pH (field)	SU	03/30/21 - 02/21/24	12	0	CI around mean	7.3/7.6	6.5/9.0	Standard/Standard	No Exceedance
04	UA	E004	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 02/21/24	10	0	CI around mean	0.635	5	Standard	No Exceedance
04	UA	E004	Selenium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
04	UA	E004	Sulfate, total	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	37.3	400	Standard	No Exceedance
04	UA	E004	Thallium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.002	0.002	Standard	No Exceedance
04	UA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	366	1,200	Standard	No Exceedance
05	UA	E004	Antimony, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
05	UA	E004	Arsenic, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.02	0.0600	Background	No Exceedance
05	UA	E004	Barium, total	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	0.022	2.0	Standard	No Exceedance
05	UA	E004	Beryllium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
05	UA	E004	Boron, total	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	18.6	2.45	Background	Exceedance
05	UA	E004	Cadmium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
05	UA	E004	Chloride, total	mg/L	03/30/21 - 02/21/24	12	2	CI around mean	7.55	200	Standard	No Exceedance
05	UA	E004	Chromium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.005	0.1	Standard	No Exceedance
05	UA	E004	Cobalt, total	mg/L	03/30/21 - 02/21/24	12	83	CI around median	0.001	0.006	Standard	No Exceedance
05	UA	E004	Fluoride, total	mg/L	03/30/21 - 02/21/24	12	8	CB around linear reg	0.539	4.0	Standard	No Exceedance
05	UA	E004	Lead, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
05	UA	E004	Lithium, total	mg/L	03/30/21 - 02/21/24	12	0	CI around geomean	0.0852	0.04	Standard	Exceedance
05	UA	E004	Mercury, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
05	UA	E004	Molybdenum, total	mg/L	03/30/21 - 02/21/24	12	0	CB around linear reg	0.0384	0.1	Standard	No Exceedance
05	UA	E004	pH (field)	SU	03/30/21 - 02/21/24	12	0	CI around mean	7.2/7.4	6.5/9.0	Standard/Standard	No Exceedance
05	UA	E004	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 02/21/24	10	0	CI around mean	0.00358	5	Standard	No Exceedance
05	UA	E004	Selenium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
05	UA	E004	Sulfate, total	mg/L	03/30/21 - 02/21/24	12	0	CB around linear reg	62.1	400	Standard	No Exceedance
05	UA	E004	Thallium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.002	0.002	Standard	No Exceedance
05	UA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	528	1,200	Standard	No Exceedance
07R	UA	E004	Antimony, total	mg/L	05/12/21 - 02/21/24	8	75	CI around median	0.001	0.006	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
07R	UA	E004	Arsenic, total	mg/L	05/12/21 - 02/21/24	8	12	CI around geomean	0.000795	0.0600	Background	No Exceedance
07R	UA	E004	Barium, total	mg/L	05/12/21 - 02/21/24	8	0	CI around median	0.0176	2.0	Standard	No Exceedance
07R	UA	E004	Beryllium, total	mg/L	05/12/21 - 02/21/24	8	75	CI around median	0.0005	0.004	Standard	No Exceedance
07R	UA	E004	Boron, total	mg/L	05/12/21 - 02/21/24	8	0	CB around linear reg	28.3	2.45	Background	Exceedance
07R	UA	E004	Cadmium, total	mg/L	05/12/21 - 02/21/24	8	75	CI around median	0.0005	0.005	Standard	No Exceedance
07R	UA	E004	Chloride, total	mg/L	05/12/21 - 02/21/24	8	0	CI around mean	4.54	200	Standard	No Exceedance
07R	UA	E004	Chromium, total	mg/L	05/12/21 - 02/21/24	8	75	CI around median	0.001	0.1	Standard	No Exceedance
07R	UA	E004	Cobalt, total	mg/L	05/12/21 - 02/21/24	8	75	CI around median	0.001	0.006	Standard	No Exceedance
07R	UA	E004	Fluoride, total	mg/L	05/12/21 - 02/21/24	8	12	CI around mean	0.0882	4.0	Standard	No Exceedance
07R	UA	E004	Lead, total	mg/L	05/12/21 - 02/21/24	8	62	CI around median	0.0005	0.0075	Standard	No Exceedance
07R	UA	E004	Lithium, total	mg/L	05/12/21 - 02/21/24	8	0	CI around mean	0.536	0.04	Standard	Exceedance
07R	UA	E004	Mercury, total	mg/L	05/12/21 - 02/21/24	8	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
07R	UA	E004	Molybdenum, total	mg/L	05/12/21 - 02/21/24	8	0	CI around mean	0.361	0.1	Standard	Exceedance
07R	UA	E004	pH (field)	SU	05/12/21 - 02/21/24	8	0	CI around mean	7.3/7.7	6.5/9.0	Standard/Standard	No Exceedance
07R	UA	E004	Radium 226 + Radium 228, total	pCi/L	05/12/21 - 02/21/24	8	0	CI around geomean	0.278	5	Standard	No Exceedance
07R	UA	E004	Selenium, total	mg/L	05/12/21 - 02/21/24	8	25	CI around mean	0.00122	0.05	Standard	No Exceedance
07R	UA	E004	Sulfate, total	mg/L	05/12/21 - 02/21/24	8	0	CI around mean	1,750	400	Standard	Exceedance
07R	UA	E004	Thallium, total	mg/L	05/12/21 - 02/21/24	8	100	All ND - Last	0.002	0.002	Standard	No Exceedance
07R	UA	E004	Total Dissolved Solids	mg/L	05/12/21 - 02/21/24	8	0	CI around mean	2,870	1,200	Standard	Exceedance
08R	UA	E004	Antimony, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
08R	UA	E004	Arsenic, total	mg/L	03/30/21 - 02/20/24	12	0	CB around linear reg	0.0239	0.0600	Background	No Exceedance
08R	UA	E004	Barium, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.055	2.0	Standard	No Exceedance
08R	UA	E004	Beryllium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
08R	UA	E004	Boron, total	mg/L	03/30/21 - 02/20/24	12	0	CI around median	14.4	2.45	Background	Exceedance
08R	UA	E004	Cadmium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
08R	UA	E004	Chloride, total	mg/L	03/30/21 - 02/20/24	12	0	CI around median	4	200	Standard	No Exceedance
08R	UA	E004	Chromium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.005	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
08R	UA	E004	Cobalt, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.006	Standard	No Exceedance
08R	UA	E004	Fluoride, total	mg/L	03/30/21 - 02/20/24	12	75	CI around median	0.1	4.0	Standard	No Exceedance
08R	UA	E004	Lead, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
08R	UA	E004	Lithium, total	mg/L	03/30/21 - 02/20/24	12	0	CI around median	0.13	0.04	Standard	Exceedance
08R	UA	E004	Mercury, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
08R	UA	E004	Molybdenum, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.174	0.1	Standard	Exceedance
08R	UA	E004	pH (field)	SU	03/30/21 - 02/20/24	12	0	CI around mean	7.0/8.0	6.5/9.0	Standard/Standard	No Exceedance
08R	UA	E004	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 02/20/24	10	0	CI around mean	0.394	5	Standard	No Exceedance
08R	UA	E004	Selenium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
08R	UA	E004	Sulfate, total	mg/L	03/30/21 - 02/20/24	12	0	CB around linear reg	518	400	Standard	Exceedance
08R	UA	E004	Thallium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.002	0.002	Standard	No Exceedance
08R	UA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	1,060	1,200	Standard	No Exceedance
17	UA	E004	Antimony, total	mg/L	--	--	--	--	--	0.006	Standard	--
17	UA	E004	Arsenic, total	mg/L	--	--	--	--	--	0.0600	Background	--
17	UA	E004	Barium, total	mg/L	--	--	--	--	--	2.0	Standard	--
17	UA	E004	Beryllium, total	mg/L	--	--	--	--	--	0.004	Standard	--
17	UA	E004	Boron, total	mg/L	--	--	--	--	--	2.45	Background	--
17	UA	E004	Cadmium, total	mg/L	--	--	--	--	--	0.005	Standard	--
17	UA	E004	Chloride, total	mg/L	--	--	--	--	--	200	Standard	--
17	UA	E004	Chromium, total	mg/L	--	--	--	--	--	0.1	Standard	--
17	UA	E004	Cobalt, total	mg/L	--	--	--	--	--	0.006	Standard	--
17	UA	E004	Fluoride, total	mg/L	--	--	--	--	--	4.0	Standard	--
17	UA	E004	Lead, total	mg/L	--	--	--	--	--	0.0075	Standard	--
17	UA	E004	Lithium, total	mg/L	--	--	--	--	--	0.04	Standard	--
17	UA	E004	Mercury, total	mg/L	--	--	--	--	--	0.002	Standard	--
17	UA	E004	Molybdenum, total	mg/L	--	--	--	--	--	0.1	Standard	--
17	UA	E004	pH (field)	SU	--	--	--	--	--	6.5/9.0	Standard/Standard	--

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
17	UA	E004	Radium 226 + Radium 228, total	pCi/L	--	--	--	--	--	5	Standard	--
17	UA	E004	Selenium, total	mg/L	--	--	--	--	--	0.05	Standard	--
17	UA	E004	Sulfate, total	mg/L	--	--	--	--	--	400	Standard	--
17	UA	E004	Thallium, total	mg/L	--	--	--	--	--	0.002	Standard	--
17	UA	E004	Total Dissolved Solids	mg/L	--	--	--	--	--	1,200	Standard	--
20	UA	E004	Antimony, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
20	UA	E004	Arsenic, total	mg/L	03/30/21 - 02/20/24	12	67	CI around median	0.001	0.0600	Background	No Exceedance
20	UA	E004	Barium, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.0175	2.0	Standard	No Exceedance
20	UA	E004	Beryllium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
20	UA	E004	Boron, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.639	2.45	Background	No Exceedance
20	UA	E004	Cadmium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
20	UA	E004	Chloride, total	mg/L	03/30/21 - 02/20/24	12	14	CI around median	4	200	Standard	No Exceedance
20	UA	E004	Chromium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.005	0.1	Standard	No Exceedance
20	UA	E004	Cobalt, total	mg/L	03/30/21 - 02/20/24	12	83	CI around median	0.001	0.006	Standard	No Exceedance
20	UA	E004	Fluoride, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.1	4.0	Standard	No Exceedance
20	UA	E004	Lead, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
20	UA	E004	Lithium, total	mg/L	03/30/21 - 02/20/24	12	0	CI around geomean	0.0198	0.04	Standard	No Exceedance
20	UA	E004	Mercury, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
20	UA	E004	Molybdenum, total	mg/L	03/30/21 - 02/20/24	12	92	CI around median	0.0015	0.1	Standard	No Exceedance
20	UA	E004	pH (field)	SU	03/30/21 - 02/20/24	12	0	CI around mean	6.9/7.1	6.5/9.0	Standard/Standard	No Exceedance
20	UA	E004	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 02/20/24	10	0	CI around mean	0.385	5	Standard	No Exceedance
20	UA	E004	Selenium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
20	UA	E004	Sulfate, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	73.2	400	Standard	No Exceedance
20	UA	E004	Thallium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.002	0.002	Standard	No Exceedance
20	UA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	402	1,200	Standard	No Exceedance
34	LGU	E004	Antimony, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
34	LGU	E004	Arsenic, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.0244	0.0600	Background	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
34	LGU	E004	Barium, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.154	2.0	Standard	No Exceedance
34	LGU	E004	Beryllium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
34	LGU	E004	Boron, total	mg/L	03/30/21 - 02/20/24	12	0	CI around geomean	0.471	2.45	Background	No Exceedance
34	LGU	E004	Cadmium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
34	LGU	E004	Chloride, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	33.1	200	Standard	No Exceedance
34	LGU	E004	Chromium, total	mg/L	03/30/21 - 02/20/24	12	42	CI around mean	0.00189	0.1	Standard	No Exceedance
34	LGU	E004	Cobalt, total	mg/L	03/30/21 - 02/20/24	12	50	CI around median	0.001	0.006	Standard	No Exceedance
34	LGU	E004	Fluoride, total	mg/L	03/30/21 - 02/20/24	12	8	CI around median	0.62	4.0	Standard	No Exceedance
34	LGU	E004	Lead, total	mg/L	03/30/21 - 02/20/24	12	8	CI around mean	0.00145	0.0075	Standard	No Exceedance
34	LGU	E004	Lithium, total	mg/L	03/30/21 - 02/20/24	12	42	CI around mean	0.00323	0.04	Standard	No Exceedance
34	LGU	E004	Mercury, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
34	LGU	E004	Molybdenum, total	mg/L	03/30/21 - 02/20/24	12	92	CI around median	0.0015	0.1	Standard	No Exceedance
34	LGU	E004	pH (field)	SU	03/30/21 - 02/20/24	12	0	CI around mean	7.0/7.2	6.5/9.0	Standard/Standard	No Exceedance
34	LGU	E004	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 02/20/24	10	0	CI around mean	0.402	5	Standard	No Exceedance
34	LGU	E004	Selenium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
34	LGU	E004	Sulfate, total	mg/L	03/30/21 - 02/20/24	12	88	CI around median	1	400	Standard	No Exceedance
34	LGU	E004	Thallium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.002	0.002	Standard	No Exceedance
34	LGU	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	474	1,200	Standard	No Exceedance
36	UA	E004	Antimony, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
36	UA	E004	Arsenic, total	mg/L	03/31/21 - 02/20/24	12	8	CB around linear reg	0.00329	0.0600	Background	No Exceedance
36	UA	E004	Barium, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.103	2.0	Standard	No Exceedance
36	UA	E004	Beryllium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
36	UA	E004	Boron, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	11.7	2.45	Background	Exceedance
36	UA	E004	Cadmium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
36	UA	E004	Chloride, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	18.1	200	Standard	No Exceedance
36	UA	E004	Chromium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.005	0.1	Standard	No Exceedance
36	UA	E004	Cobalt, total	mg/L	03/31/21 - 02/20/24	12	92	CI around median	0.001	0.006	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
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VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
36	UA	E004	Fluoride, total	mg/L	03/31/21 - 02/20/24	12	8	CI around median	0.25	4.0	Standard	No Exceedance
36	UA	E004	Lead, total	mg/L	03/31/21 - 02/20/24	12	92	CI around median	0.0005	0.0075	Standard	No Exceedance
36	UA	E004	Lithium, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.134	0.04	Standard	Exceedance
36	UA	E004	Mercury, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
36	UA	E004	Molybdenum, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.11	0.1	Standard	Exceedance
36	UA	E004	pH (field)	SU	03/31/21 - 02/20/24	12	0	CI around mean	7.0/7.3	6.5/9.0	Standard/Standard	No Exceedance
36	UA	E004	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 02/20/24	11	0	CI around mean	1.03	5	Standard	No Exceedance
36	UA	E004	Selenium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
36	UA	E004	Sulfate, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	952	400	Standard	Exceedance
36	UA	E004	Thallium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.002	0.002	Standard	No Exceedance
36	UA	E004	Total Dissolved Solids	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	1,650	1,200	Standard	Exceedance
37	LGU	E004	Antimony, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
37	LGU	E004	Arsenic, total	mg/L	03/31/21 - 02/20/24	12	0	CI around median	0.0257	0.0600	Background	No Exceedance
37	LGU	E004	Barium, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.281	2.0	Standard	No Exceedance
37	LGU	E004	Beryllium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
37	LGU	E004	Boron, total	mg/L	03/31/21 - 02/20/24	12	0	CB around linear reg	1.67	2.45	Background	No Exceedance
37	LGU	E004	Cadmium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
37	LGU	E004	Chloride, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	41.3	200	Standard	No Exceedance
37	LGU	E004	Chromium, total	mg/L	03/31/21 - 02/20/24	12	92	CB around T-S line	0.0015	0.1	Standard	No Exceedance
37	LGU	E004	Cobalt, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.001	0.006	Standard	No Exceedance
37	LGU	E004	Fluoride, total	mg/L	03/31/21 - 02/20/24	12	8	CI around mean	0.562	4.0	Standard	No Exceedance
37	LGU	E004	Lead, total	mg/L	03/31/21 - 02/20/24	12	75	CI around median	0.0005	0.0075	Standard	No Exceedance
37	LGU	E004	Lithium, total	mg/L	03/31/21 - 02/20/24	12	92	CI around median	0.003	0.04	Standard	No Exceedance
37	LGU	E004	Mercury, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
37	LGU	E004	Molybdenum, total	mg/L	03/31/21 - 02/20/24	12	92	CI around median	0.0015	0.1	Standard	No Exceedance
37	LGU	E004	pH (field)	SU	03/31/21 - 02/20/24	12	0	CI around mean	6.8/7.1	6.5/9.0	Standard/Standard	No Exceedance
37	LGU	E004	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 02/20/24	11	0	CI around mean	0.869	5	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
37	LGU	E004	Selenium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
37	LGU	E004	Sulfate, total	mg/L	03/31/21 - 02/20/24	12	0	CB around linear reg	97	400	Standard	No Exceedance
37	LGU	E004	Thallium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.002	0.002	Standard	No Exceedance
37	LGU	E004	Total Dissolved Solids	mg/L	03/31/21 - 02/20/24	12	0	CB around linear reg	804	1,200	Standard	No Exceedance
38	UA	E004	Antimony, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
38	UA	E004	Arsenic, total	mg/L	03/30/21 - 02/20/24	12	0	CB around linear reg	0.0261	0.0600	Background	No Exceedance
38	UA	E004	Barium, total	mg/L	03/30/21 - 02/20/24	12	0	CB around T-S line	-0.129	2.0	Standard	No Exceedance
38	UA	E004	Beryllium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
38	UA	E004	Boron, total	mg/L	03/30/21 - 02/20/24	12	0	CI around geomean	0.414	2.45	Background	No Exceedance
38	UA	E004	Cadmium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
38	UA	E004	Chloride, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	17.5	200	Standard	No Exceedance
38	UA	E004	Chromium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.005	0.1	Standard	No Exceedance
38	UA	E004	Cobalt, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.006	Standard	No Exceedance
38	UA	E004	Fluoride, total	mg/L	03/30/21 - 02/20/24	12	8	CI around geomean	0.347	4.0	Standard	No Exceedance
38	UA	E004	Lead, total	mg/L	03/30/21 - 02/20/24	12	92	CI around median	0.0005	0.0075	Standard	No Exceedance
38	UA	E004	Lithium, total	mg/L	03/30/21 - 02/20/24	12	50	CI around geomean	0.00293	0.04	Standard	No Exceedance
38	UA	E004	Mercury, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
38	UA	E004	Molybdenum, total	mg/L	03/30/21 - 02/20/24	12	33	CI around mean	0.00237	0.1	Standard	No Exceedance
38	UA	E004	pH (field)	SU	03/30/21 - 02/20/24	12	0	CI around mean	6.9/7.1	6.5/9.0	Standard/Standard	No Exceedance
38	UA	E004	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 02/20/24	10	0	CI around mean	0.935	5	Standard	No Exceedance
38	UA	E004	Selenium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
38	UA	E004	Sulfate, total	mg/L	03/30/21 - 02/20/24	12	92	CB around T-S line	0.0678	400	Standard	No Exceedance
38	UA	E004	Thallium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.002	0.002	Standard	No Exceedance
38	UA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	500	1,200	Standard	No Exceedance
40	UA	E004	Antimony, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
40	UA	E004	Arsenic, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.0173	0.0600	Background	No Exceedance
40	UA	E004	Barium, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.0297	2.0	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
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VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
40	UA	E004	Beryllium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
40	UA	E004	Boron, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	19.8	2.45	Background	Exceedance
40	UA	E004	Cadmium, total	mg/L	03/31/21 - 02/20/24	12	92	CI around median	0.0005	0.005	Standard	No Exceedance
40	UA	E004	Chloride, total	mg/L	03/31/21 - 02/20/24	12	0	CB around linear reg	6.17	200	Standard	No Exceedance
40	UA	E004	Chromium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.005	0.1	Standard	No Exceedance
40	UA	E004	Cobalt, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.0053	0.006	Standard	No Exceedance
40	UA	E004	Fluoride, total	mg/L	03/31/21 - 02/20/24	12	83	CI around median	0.1	4.0	Standard	No Exceedance
40	UA	E004	Lead, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
40	UA	E004	Lithium, total	mg/L	03/31/21 - 02/20/24	12	0	CI around median	0.74	0.04	Standard	Exceedance
40	UA	E004	Mercury, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
40	UA	E004	Molybdenum, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.0582	0.1	Standard	No Exceedance
40	UA	E004	pH (field)	SU	03/31/21 - 02/20/24	11	0	CI around mean	6.4/6.6	6.5/9.0	Standard/Standard	No Exceedance
40	UA	E004	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 02/20/24	11	0	CI around mean	0.708	5	Standard	No Exceedance
40	UA	E004	Selenium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
40	UA	E004	Sulfate, total	mg/L	03/31/21 - 02/20/24	12	0	CB around linear reg	2,960	400	Standard	Exceedance
40	UA	E004	Thallium, total	mg/L	03/31/21 - 02/20/24	12	83	CI around median	0.002	0.002	Standard	No Exceedance
40	UA	E004	Total Dissolved Solids	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	4,400	1,200	Standard	Exceedance
41	UA	E004	Antimony, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.003	0.006	Standard	No Exceedance
41	UA	E004	Arsenic, total	mg/L	03/30/21 - 02/21/24	12	0	CB around linear reg	0.0103	0.0600	Background	No Exceedance
41	UA	E004	Barium, total	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	0.231	2.0	Standard	No Exceedance
41	UA	E004	Beryllium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.001	0.004	Standard	No Exceedance
41	UA	E004	Boron, total	mg/L	03/30/21 - 02/21/24	12	0	CB around linear reg	2.93	2.45	Background	Exceedance
41	UA	E004	Cadmium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
41	UA	E004	Chloride, total	mg/L	03/30/21 - 02/21/24	12	0	CB around linear reg	46.4	200	Standard	No Exceedance
41	UA	E004	Chromium, total	mg/L	03/30/21 - 02/21/24	12	92	CI around median	0.0015	0.1	Standard	No Exceedance
41	UA	E004	Cobalt, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.001	0.006	Standard	No Exceedance
41	UA	E004	Fluoride, total	mg/L	03/30/21 - 02/21/24	12	8	CI around median	0.41	4.0	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
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VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
41	UA	E004	Lead, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
41	UA	E004	Lithium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.005	0.04	Standard	No Exceedance
41	UA	E004	Mercury, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
41	UA	E004	Molybdenum, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.005	0.1	Standard	No Exceedance
41	UA	E004	pH (field)	SU	03/30/21 - 02/21/24	12	0	CI around mean	7.0/7.2	6.5/9.0	Standard/Standard	No Exceedance
41	UA	E004	Radium 226 + Radium 228, total	pCi/L	04/20/21 - 02/21/24	10	0	CI around mean	1.07	5	Standard	No Exceedance
41	UA	E004	Selenium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
41	UA	E004	Sulfate, total	mg/L	03/30/21 - 02/21/24	12	83	CI around median	1	400	Standard	No Exceedance
41	UA	E004	Thallium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.002	0.002	Standard	No Exceedance
41	UA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	600	1,200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 1, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Notes:

- = no data available

Compliance Result:

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

Exceedance: The statistical result exceeded the GWPS.

HSU = hydrostratigraphic unit:

LGU = Lower Groundwater Unit

UA = Uppermost Aquifer

mg/L = milligrams per liter

ND = non-detect

pCi/L = picocuries per liter

SU = standard units

Sample Count = number of samples from Sampled Date Range used to calculate the Statistical Result

Statistical Calculation = method used to calculate the statistical result:

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

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

CB around linear reg = Confidence band around linear regression

CI around geomean = Confidence interval around the geometric mean

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

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

Statistical Result = calculated in accordance with the Statistical Analysis Plan using constituent concentrations observed at each monitoring well during all sampling events within the specified date range

For pH, the values presented are the lower / upper limits

GWPS = Groundwater Protection Standard

GWPS Source:

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

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

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
02	LGU	E005	Antimony, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.003	0.006	Standard	No Exceedance
02	LGU	E005	Arsenic, total	mg/L	03/31/21 - 05/08/24	13	8	CI around mean	0.00573	0.0600	Background	No Exceedance
02	LGU	E005	Barium, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	0.196	2.0	Standard	No Exceedance
02	LGU	E005	Beryllium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
02	LGU	E005	Boron, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	0.309	2.45	Background	No Exceedance
02	LGU	E005	Cadmium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
02	LGU	E005	Chloride, total	mg/L	03/31/21 - 05/08/24	13	0	CI around median	35	200	Standard	No Exceedance
02	LGU	E005	Chromium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.005	0.1	Standard	No Exceedance
02	LGU	E005	Cobalt, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.001	0.006	Standard	No Exceedance
02	LGU	E005	Fluoride, total	mg/L	03/31/21 - 05/08/24	13	8	CB around linear reg	0.52	4.0	Standard	No Exceedance
02	LGU	E005	Lead, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
02	LGU	E005	Lithium, total	mg/L	03/31/21 - 05/08/24	13	54	CI around median	0.0034	0.04	Standard	No Exceedance
02	LGU	E005	Mercury, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
02	LGU	E005	Molybdenum, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.005	0.1	Standard	No Exceedance
02	LGU	E005	pH (field)	SU	03/31/21 - 05/08/24	13	0	CI around mean	7.4/7.8	6.5/9.0	Standard/Standard	No Exceedance
02	LGU	E005	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 05/08/24	12	0	CI around mean	0.5	5	Standard	No Exceedance
02	LGU	E005	Selenium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
02	LGU	E005	Sulfate, total	mg/L	03/31/21 - 05/08/24	13	0	CB around linear reg	-13.2	400	Standard	No Exceedance
02	LGU	E005	Thallium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.002	0.002	Standard	No Exceedance
02	LGU	E005	Total Dissolved Solids	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	562	1,200	Standard	No Exceedance
03R	LGU	E005	Antimony, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.003	0.006	Standard	No Exceedance
03R	LGU	E005	Arsenic, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	0.00485	0.0600	Background	No Exceedance
03R	LGU	E005	Barium, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	0.289	2.0	Standard	No Exceedance
03R	LGU	E005	Beryllium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
03R	LGU	E005	Boron, total	mg/L	03/30/21 - 06/06/24	13	0	CB around linear reg	26	2.45	Background	Exceedance
03R	LGU	E005	Cadmium, total	mg/L	03/30/21 - 06/06/24	13	77	CI around median	0.00051	0.005	Standard	No Exceedance
03R	LGU	E005	Chloride, total	mg/L	03/30/21 - 06/06/24	13	2	CI around mean	26	200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
03R	LGU	E005	Chromium, total	mg/L	03/30/21 - 06/06/24	13	85	CI around median	0.0015	0.1	Standard	No Exceedance
03R	LGU	E005	Cobalt, total	mg/L	03/30/21 - 06/06/24	13	85	CI around median	0.001	0.006	Standard	No Exceedance
03R	LGU	E005	Fluoride, total	mg/L	03/30/21 - 06/06/24	13	8	CI around mean	0.445	4.0	Standard	No Exceedance
03R	LGU	E005	Lead, total	mg/L	03/30/21 - 06/06/24	13	62	CI around median	0.001	0.0075	Standard	No Exceedance
03R	LGU	E005	Lithium, total	mg/L	03/30/21 - 06/06/24	13	92	CB around T-S line	0.003	0.04	Standard	No Exceedance
03R	LGU	E005	Mercury, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
03R	LGU	E005	Molybdenum, total	mg/L	03/30/21 - 06/06/24	13	0	CB around linear reg	0.313	0.1	Standard	Exceedance
03R	LGU	E005	pH (field)	SU	03/30/21 - 06/06/24	13	0	CI around mean	7.2/7.4	6.5/9.0	Standard/Standard	No Exceedance
03R	LGU	E005	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 06/06/24	11	0	CI around mean	0.999	5	Standard	No Exceedance
03R	LGU	E005	Selenium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
03R	LGU	E005	Sulfate, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	486	400	Standard	Exceedance
03R	LGU	E005	Thallium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.002	0.002	Standard	No Exceedance
03R	LGU	E005	Total Dissolved Solids	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	1,090	1,200	Standard	No Exceedance
04	UA	E005	Antimony, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.003	0.006	Standard	No Exceedance
04	UA	E005	Arsenic, total	mg/L	03/30/21 - 05/08/24	13	8	CI around geomean	0.00547	0.0600	Background	No Exceedance
04	UA	E005	Barium, total	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	0.221	2.0	Standard	No Exceedance
04	UA	E005	Beryllium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
04	UA	E005	Boron, total	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	8.35	2.45	Background	Exceedance
04	UA	E005	Cadmium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
04	UA	E005	Chloride, total	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	10.3	200	Standard	No Exceedance
04	UA	E005	Chromium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.005	0.1	Standard	No Exceedance
04	UA	E005	Cobalt, total	mg/L	03/30/21 - 05/08/24	13	92	Most recent sample	0.001	0.006	Standard	No Exceedance
04	UA	E005	Fluoride, total	mg/L	03/30/21 - 05/08/24	13	8	CI around median	0.3	4.0	Standard	No Exceedance
04	UA	E005	Lead, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
04	UA	E005	Lithium, total	mg/L	03/30/21 - 05/08/24	13	0	CB around linear reg	0.0389	0.04	Standard	No Exceedance
04	UA	E005	Mercury, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
04	UA	E005	Molybdenum, total	mg/L	03/30/21 - 05/08/24	13	0	CB around linear reg	0.033	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
04	UA	E005	pH (field)	SU	03/30/21 - 05/08/24	13	0	CI around mean	7.4/7.6	6.5/9.0	Standard/Standard	No Exceedance
04	UA	E005	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 05/08/24	11	0	CI around mean	0.7	5	Standard	No Exceedance
04	UA	E005	Selenium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
04	UA	E005	Sulfate, total	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	35.5	400	Standard	No Exceedance
04	UA	E005	Thallium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.002	0.002	Standard	No Exceedance
04	UA	E005	Total Dissolved Solids	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	363	1,200	Standard	No Exceedance
05	UA	E005	Antimony, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.003	0.006	Standard	No Exceedance
05	UA	E005	Arsenic, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.001	0.0600	Background	No Exceedance
05	UA	E005	Barium, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	0.0222	2.0	Standard	No Exceedance
05	UA	E005	Beryllium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
05	UA	E005	Boron, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	18.4	2.45	Background	Exceedance
05	UA	E005	Cadmium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
05	UA	E005	Chloride, total	mg/L	03/30/21 - 06/06/24	13	2	CI around mean	7.59	200	Standard	No Exceedance
05	UA	E005	Chromium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.005	0.1	Standard	No Exceedance
05	UA	E005	Cobalt, total	mg/L	03/30/21 - 06/06/24	13	85	CI around median	0.001	0.006	Standard	No Exceedance
05	UA	E005	Fluoride, total	mg/L	03/30/21 - 06/06/24	13	8	CB around linear reg	0.549	4.0	Standard	No Exceedance
05	UA	E005	Lead, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
05	UA	E005	Lithium, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	0.0858	0.04	Standard	Exceedance
05	UA	E005	Mercury, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
05	UA	E005	Molybdenum, total	mg/L	03/30/21 - 06/06/24	13	0	CB around linear reg	0.0402	0.1	Standard	No Exceedance
05	UA	E005	pH (field)	SU	03/30/21 - 06/06/24	13	0	CB around linear reg	7.4/7.8	6.5/9.0	Standard/Standard	No Exceedance
05	UA	E005	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 06/06/24	11	0	CI around geomean	0.0916	5	Standard	No Exceedance
05	UA	E005	Selenium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
05	UA	E005	Sulfate, total	mg/L	03/30/21 - 06/06/24	13	0	CI around median	224	400	Standard	No Exceedance
05	UA	E005	Thallium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.002	0.002	Standard	No Exceedance
05	UA	E005	Total Dissolved Solids	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	531	1,200	Standard	No Exceedance
07R	UA	E005	Antimony, total	mg/L	05/12/21 - 05/07/24	9	78	CI around median	0.001	0.006	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
07R	UA	E005	Arsenic, total	mg/L	05/12/21 - 05/07/24	9	11	CI around median	0.0011	0.0600	Background	No Exceedance
07R	UA	E005	Barium, total	mg/L	05/12/21 - 05/07/24	9	0	CI around median	0.0176	2.0	Standard	No Exceedance
07R	UA	E005	Beryllium, total	mg/L	05/12/21 - 05/07/24	9	78	CI around median	0.001	0.004	Standard	No Exceedance
07R	UA	E005	Boron, total	mg/L	05/12/21 - 05/07/24	9	0	CI around mean	34.8	2.45	Background	Exceedance
07R	UA	E005	Cadmium, total	mg/L	05/12/21 - 05/07/24	9	78	CI around median	0.0005	0.005	Standard	No Exceedance
07R	UA	E005	Chloride, total	mg/L	05/12/21 - 05/07/24	9	0	CI around mean	4.38	200	Standard	No Exceedance
07R	UA	E005	Chromium, total	mg/L	05/12/21 - 05/07/24	9	78	CI around median	0.0015	0.1	Standard	No Exceedance
07R	UA	E005	Cobalt, total	mg/L	05/12/21 - 05/07/24	9	78	CI around median	0.001	0.006	Standard	No Exceedance
07R	UA	E005	Fluoride, total	mg/L	05/12/21 - 05/07/24	9	11	CI around mean	0.0916	4.0	Standard	No Exceedance
07R	UA	E005	Lead, total	mg/L	05/12/21 - 05/07/24	9	67	CI around median	0.0005	0.0075	Standard	No Exceedance
07R	UA	E005	Lithium, total	mg/L	05/12/21 - 05/07/24	9	0	CI around mean	0.54	0.04	Standard	Exceedance
07R	UA	E005	Mercury, total	mg/L	05/12/21 - 05/07/24	9	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
07R	UA	E005	Molybdenum, total	mg/L	05/12/21 - 05/07/24	9	0	CI around mean	0.373	0.1	Standard	Exceedance
07R	UA	E005	pH (field)	SU	05/12/21 - 05/07/24	9	0	CI around mean	7.3/7.7	6.5/9.0	Standard/Standard	No Exceedance
07R	UA	E005	Radium 226 + Radium 228, total	pCi/L	05/12/21 - 05/07/24	9	0	CI around geomean	0.206	5	Standard	No Exceedance
07R	UA	E005	Selenium, total	mg/L	05/12/21 - 05/07/24	9	22	CI around mean	0.0015	0.05	Standard	No Exceedance
07R	UA	E005	Sulfate, total	mg/L	05/12/21 - 05/07/24	9	0	CI around mean	1,770	400	Standard	Exceedance
07R	UA	E005	Thallium, total	mg/L	05/12/21 - 05/07/24	9	100	All ND - Last	0.002	0.002	Standard	No Exceedance
07R	UA	E005	Total Dissolved Solids	mg/L	05/12/21 - 05/07/24	9	0	CI around mean	2,870	1,200	Standard	Exceedance
08R	UA	E005	Antimony, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.003	0.006	Standard	No Exceedance
08R	UA	E005	Arsenic, total	mg/L	03/30/21 - 06/06/24	13	0	CB around linear reg	0.0265	0.0600	Background	No Exceedance
08R	UA	E005	Barium, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	0.0563	2.0	Standard	No Exceedance
08R	UA	E005	Beryllium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
08R	UA	E005	Boron, total	mg/L	03/30/21 - 06/06/24	13	0	CI around median	29.8	2.45	Background	Exceedance
08R	UA	E005	Cadmium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
08R	UA	E005	Chloride, total	mg/L	03/30/21 - 06/06/24	13	0	CI around median	5.7	200	Standard	No Exceedance
08R	UA	E005	Chromium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.005	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
08R	UA	E005	Cobalt, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.001	0.006	Standard	No Exceedance
08R	UA	E005	Fluoride, total	mg/L	03/30/21 - 06/06/24	13	77	CI around median	0.1	4.0	Standard	No Exceedance
08R	UA	E005	Lead, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
08R	UA	E005	Lithium, total	mg/L	03/30/21 - 06/06/24	13	0	CI around median	0.288	0.04	Standard	Exceedance
08R	UA	E005	Mercury, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
08R	UA	E005	Molybdenum, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	0.187	0.1	Standard	Exceedance
08R	UA	E005	pH (field)	SU	03/30/21 - 06/06/24	13	0	CI around mean	7.1/7.9	6.5/9.0	Standard/Standard	No Exceedance
08R	UA	E005	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 06/06/24	11	0	CI around mean	0.389	5	Standard	No Exceedance
08R	UA	E005	Selenium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
08R	UA	E005	Sulfate, total	mg/L	03/30/21 - 06/06/24	13	0	CB around linear reg	550	400	Standard	Exceedance
08R	UA	E005	Thallium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.002	0.002	Standard	No Exceedance
08R	UA	E005	Total Dissolved Solids	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	1,080	1,200	Standard	No Exceedance
17	UA	E005	Antimony, total	mg/L	03/31/21 - 05/07/24	9	100	All ND - Last	0.003	0.006	Standard	No Exceedance
17	UA	E005	Arsenic, total	mg/L	03/31/21 - 05/07/24	9	22	CI around mean	0.00284	0.0600	Background	No Exceedance
17	UA	E005	Barium, total	mg/L	03/31/21 - 05/07/24	9	0	CI around mean	0.025	2.0	Standard	No Exceedance
17	UA	E005	Beryllium, total	mg/L	03/31/21 - 05/07/24	9	100	All ND - Last	0.001	0.004	Standard	No Exceedance
17	UA	E005	Boron, total	mg/L	03/31/21 - 05/07/24	9	0	CI around mean	3.03	2.45	Background	Exceedance
17	UA	E005	Cadmium, total	mg/L	03/31/21 - 05/07/24	9	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
17	UA	E005	Chloride, total	mg/L	03/31/21 - 05/09/24	9	0	CI around mean	15.3	200	Standard	No Exceedance
17	UA	E005	Chromium, total	mg/L	03/31/21 - 05/07/24	9	100	All ND - Last	0.005	0.1	Standard	No Exceedance
17	UA	E005	Cobalt, total	mg/L	03/31/21 - 05/07/24	9	22	CI around mean	0.00133	0.006	Standard	No Exceedance
17	UA	E005	Fluoride, total	mg/L	03/31/21 - 05/09/24	9	11	CI around geomean	0.143	4.0	Standard	No Exceedance
17	UA	E005	Lead, total	mg/L	03/31/21 - 05/07/24	9	67	CI around median	0.0005	0.0075	Standard	No Exceedance
17	UA	E005	Lithium, total	mg/L	03/31/21 - 05/07/24	9	0	CI around mean	0.0191	0.04	Standard	No Exceedance
17	UA	E005	Mercury, total	mg/L	03/31/21 - 05/07/24	9	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
17	UA	E005	Molybdenum, total	mg/L	03/31/21 - 05/07/24	9	44	CI around mean	0.00172	0.1	Standard	No Exceedance
17	UA	E005	pH (field)	SU	03/31/21 - 05/07/24	9	0	CI around mean	6.7/7.0	6.5/9.0	Standard/Standard	No Exceedance

TABLE 2.
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VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
17	UA	E005	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 05/09/24	8	0	CI around mean	0.158	5	Standard	No Exceedance
17	UA	E005	Selenium, total	mg/L	03/31/21 - 05/07/24	9	89	CI around median	0.001	0.05	Standard	No Exceedance
17	UA	E005	Sulfate, total	mg/L	03/31/21 - 05/09/24	9	0	CI around geomean	911	400	Standard	Exceedance
17	UA	E005	Thallium, total	mg/L	03/31/21 - 05/07/24	9	100	All ND - Last	0.002	0.002	Standard	No Exceedance
17	UA	E005	Total Dissolved Solids	mg/L	03/31/21 - 05/09/24	9	0	CI around mean	1,620	1,200	Standard	Exceedance
20	UA	E005	Antimony, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.003	0.006	Standard	No Exceedance
20	UA	E005	Arsenic, total	mg/L	03/30/21 - 06/06/24	13	69	CI around median	0.001	0.0600	Background	No Exceedance
20	UA	E005	Barium, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	0.0178	2.0	Standard	No Exceedance
20	UA	E005	Beryllium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
20	UA	E005	Boron, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	0.689	2.45	Background	No Exceedance
20	UA	E005	Cadmium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
20	UA	E005	Chloride, total	mg/L	03/30/21 - 06/06/24	13	14	CI around median	4	200	Standard	No Exceedance
20	UA	E005	Chromium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.005	0.1	Standard	No Exceedance
20	UA	E005	Cobalt, total	mg/L	03/30/21 - 06/06/24	13	85	CI around median	0.001	0.006	Standard	No Exceedance
20	UA	E005	Fluoride, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.1	4.0	Standard	No Exceedance
20	UA	E005	Lead, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
20	UA	E005	Lithium, total	mg/L	03/30/21 - 06/06/24	13	0	CI around geomean	0.0201	0.04	Standard	No Exceedance
20	UA	E005	Mercury, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
20	UA	E005	Molybdenum, total	mg/L	03/30/21 - 06/06/24	13	92	CI around median	0.0015	0.1	Standard	No Exceedance
20	UA	E005	pH (field)	SU	03/30/21 - 06/06/24	13	0	CI around median	6.9/7.1	6.5/9.0	Standard/Standard	No Exceedance
20	UA	E005	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 06/06/24	11	0	CI around mean	0.404	5	Standard	No Exceedance
20	UA	E005	Selenium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
20	UA	E005	Sulfate, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	74.4	400	Standard	No Exceedance
20	UA	E005	Thallium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.002	0.002	Standard	No Exceedance
20	UA	E005	Total Dissolved Solids	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	409	1,200	Standard	No Exceedance
34	LGU	E005	Antimony, total	mg/L	03/30/21 - 05/07/24	13	100	All ND - Last	0.003	0.006	Standard	No Exceedance
34	LGU	E005	Arsenic, total	mg/L	03/30/21 - 05/07/24	13	0	CI around mean	0.0243	0.0600	Background	No Exceedance

TABLE 2.
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VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
34	LGU	E005	Barium, total	mg/L	03/30/21 - 05/07/24	13	0	CI around mean	0.154	2.0	Standard	No Exceedance
34	LGU	E005	Beryllium, total	mg/L	03/30/21 - 05/07/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
34	LGU	E005	Boron, total	mg/L	03/30/21 - 05/07/24	13	0	CI around mean	0.475	2.45	Background	No Exceedance
34	LGU	E005	Cadmium, total	mg/L	03/30/21 - 05/07/24	13	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
34	LGU	E005	Chloride, total	mg/L	03/30/21 - 05/07/24	13	0	CI around mean	32.9	200	Standard	No Exceedance
34	LGU	E005	Chromium, total	mg/L	03/30/21 - 05/07/24	13	46	CI around mean	0.00194	0.1	Standard	No Exceedance
34	LGU	E005	Cobalt, total	mg/L	03/30/21 - 05/07/24	13	54	CI around median	0.001	0.006	Standard	No Exceedance
34	LGU	E005	Fluoride, total	mg/L	03/30/21 - 05/07/24	13	8	CI around median	0.63	4.0	Standard	No Exceedance
34	LGU	E005	Lead, total	mg/L	03/30/21 - 05/07/24	13	15	CI around mean	0.00115	0.0075	Standard	No Exceedance
34	LGU	E005	Lithium, total	mg/L	03/30/21 - 05/07/24	13	46	CI around mean	0.00325	0.04	Standard	No Exceedance
34	LGU	E005	Mercury, total	mg/L	03/30/21 - 05/07/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
34	LGU	E005	Molybdenum, total	mg/L	03/30/21 - 05/07/24	13	92	CI around median	0.0015	0.1	Standard	No Exceedance
34	LGU	E005	pH (field)	SU	03/30/21 - 05/07/24	13	0	CI around mean	7.0/7.2	6.5/9.0	Standard/Standard	No Exceedance
34	LGU	E005	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 05/07/24	11	0	CI around mean	0.469	5	Standard	No Exceedance
34	LGU	E005	Selenium, total	mg/L	03/30/21 - 05/07/24	13	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
34	LGU	E005	Sulfate, total	mg/L	03/30/21 - 05/07/24	13	88	CB around T-S line	-1.09	400	Standard	No Exceedance
34	LGU	E005	Thallium, total	mg/L	03/30/21 - 05/07/24	13	100	All ND - Last	0.002	0.002	Standard	No Exceedance
34	LGU	E005	Total Dissolved Solids	mg/L	03/30/21 - 05/07/24	13	0	CI around mean	478	1,200	Standard	No Exceedance
36	UA	E005	Antimony, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.003	0.006	Standard	No Exceedance
36	UA	E005	Arsenic, total	mg/L	03/31/21 - 05/08/24	13	8	CB around linear reg	0.00276	0.0600	Background	No Exceedance
36	UA	E005	Barium, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	0.0964	2.0	Standard	No Exceedance
36	UA	E005	Beryllium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
36	UA	E005	Boron, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	11.9	2.45	Background	Exceedance
36	UA	E005	Cadmium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
36	UA	E005	Chloride, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	17	200	Standard	No Exceedance
36	UA	E005	Chromium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.005	0.1	Standard	No Exceedance
36	UA	E005	Cobalt, total	mg/L	03/31/21 - 05/08/24	13	92	CI around median	0.001	0.006	Standard	No Exceedance

TABLE 2.
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NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
36	UA	E005	Fluoride, total	mg/L	03/31/21 - 05/08/24	13	8	CI around median	0.25	4.0	Standard	No Exceedance
36	UA	E005	Lead, total	mg/L	03/31/21 - 05/08/24	13	92	CI around median	0.0005	0.0075	Standard	No Exceedance
36	UA	E005	Lithium, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	0.143	0.04	Standard	Exceedance
36	UA	E005	Mercury, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
36	UA	E005	Molybdenum, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	0.116	0.1	Standard	Exceedance
36	UA	E005	pH (field)	SU	03/31/21 - 05/08/24	13	0	CI around mean	7.0/7.3	6.5/9.0	Standard/Standard	No Exceedance
36	UA	E005	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 05/08/24	12	0	CI around mean	1.02	5	Standard	No Exceedance
36	UA	E005	Selenium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
36	UA	E005	Sulfate, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	961	400	Standard	Exceedance
36	UA	E005	Thallium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.002	0.002	Standard	No Exceedance
36	UA	E005	Total Dissolved Solids	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	1,660	1,200	Standard	Exceedance
37	LGU	E005	Antimony, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.003	0.006	Standard	No Exceedance
37	LGU	E005	Arsenic, total	mg/L	03/31/21 - 05/08/24	13	0	CI around median	0.034	0.0600	Background	No Exceedance
37	LGU	E005	Barium, total	mg/L	03/31/21 - 05/08/24	13	0	CB around linear reg	0.309	2.0	Standard	No Exceedance
37	LGU	E005	Beryllium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
37	LGU	E005	Boron, total	mg/L	03/31/21 - 05/08/24	13	0	CB around linear reg	1.73	2.45	Background	No Exceedance
37	LGU	E005	Cadmium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
37	LGU	E005	Chloride, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	41.3	200	Standard	No Exceedance
37	LGU	E005	Chromium, total	mg/L	03/31/21 - 05/08/24	13	92	CB around T-S line	0.0015	0.1	Standard	No Exceedance
37	LGU	E005	Cobalt, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.001	0.006	Standard	No Exceedance
37	LGU	E005	Fluoride, total	mg/L	03/31/21 - 05/08/24	13	8	CI around mean	0.567	4.0	Standard	No Exceedance
37	LGU	E005	Lead, total	mg/L	03/31/21 - 05/08/24	13	77	CI around median	0.0005	0.0075	Standard	No Exceedance
37	LGU	E005	Lithium, total	mg/L	03/31/21 - 05/08/24	13	92	CI around median	0.003	0.04	Standard	No Exceedance
37	LGU	E005	Mercury, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
37	LGU	E005	Molybdenum, total	mg/L	03/31/21 - 05/08/24	13	92	CI around median	0.0015	0.1	Standard	No Exceedance
37	LGU	E005	pH (field)	SU	03/31/21 - 05/08/24	13	0	CI around mean	6.9/7.1	6.5/9.0	Standard/Standard	No Exceedance
37	LGU	E005	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 05/08/24	12	0	CI around mean	0.934	5	Standard	No Exceedance

TABLE 2.
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VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
37	LGU	E005	Selenium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
37	LGU	E005	Sulfate, total	mg/L	03/31/21 - 05/08/24	13	0	CB around T-S line	222	400	Standard	No Exceedance
37	LGU	E005	Thallium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.002	0.002	Standard	No Exceedance
37	LGU	E005	Total Dissolved Solids	mg/L	03/31/21 - 05/08/24	13	0	CB around linear reg	839	1,200	Standard	No Exceedance
38	UA	E005	Antimony, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.003	0.006	Standard	No Exceedance
38	UA	E005	Arsenic, total	mg/L	03/30/21 - 05/08/24	13	0	CB around linear reg	0.0273	0.0600	Background	No Exceedance
38	UA	E005	Barium, total	mg/L	03/30/21 - 05/08/24	13	0	CB around T-S line	-0.0435	2.0	Standard	No Exceedance
38	UA	E005	Beryllium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
38	UA	E005	Boron, total	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	0.417	2.45	Background	No Exceedance
38	UA	E005	Cadmium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
38	UA	E005	Chloride, total	mg/L	03/30/21 - 05/08/24	13	0	CB around linear reg	13.9	200	Standard	No Exceedance
38	UA	E005	Chromium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.005	0.1	Standard	No Exceedance
38	UA	E005	Cobalt, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.001	0.006	Standard	No Exceedance
38	UA	E005	Fluoride, total	mg/L	03/30/21 - 05/08/24	13	8	CI around geomean	0.35	4.0	Standard	No Exceedance
38	UA	E005	Lead, total	mg/L	03/30/21 - 05/08/24	13	92	CI around median	0.0005	0.0075	Standard	No Exceedance
38	UA	E005	Lithium, total	mg/L	03/30/21 - 05/08/24	13	54	CI around median	0.003	0.04	Standard	No Exceedance
38	UA	E005	Mercury, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
38	UA	E005	Molybdenum, total	mg/L	03/30/21 - 05/08/24	13	38	CI around mean	0.00241	0.1	Standard	No Exceedance
38	UA	E005	pH (field)	SU	03/30/21 - 05/08/24	13	0	CI around mean	6.9/7.1	6.5/9.0	Standard/Standard	No Exceedance
38	UA	E005	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 05/08/24	11	0	CI around mean	0.986	5	Standard	No Exceedance
38	UA	E005	Selenium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
38	UA	E005	Sulfate, total	mg/L	03/30/21 - 05/08/24	13	92	CB around T-S line	-0.857	400	Standard	No Exceedance
38	UA	E005	Thallium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.002	0.002	Standard	No Exceedance
38	UA	E005	Total Dissolved Solids	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	503	1,200	Standard	No Exceedance
40	UA	E005	Antimony, total	mg/L	03/31/21 - 05/07/24	13	100	All ND - Last	0.003	0.006	Standard	No Exceedance
40	UA	E005	Arsenic, total	mg/L	03/31/21 - 05/07/24	13	0	CI around mean	0.0174	0.0600	Background	No Exceedance
40	UA	E005	Barium, total	mg/L	03/31/21 - 05/07/24	13	0	CI around mean	0.0292	2.0	Standard	No Exceedance

TABLE 2.
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VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
40	UA	E005	Beryllium, total	mg/L	03/31/21 - 05/07/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
40	UA	E005	Boron, total	mg/L	03/31/21 - 05/07/24	13	0	CI around mean	19.9	2.45	Background	Exceedance
40	UA	E005	Cadmium, total	mg/L	03/31/21 - 05/07/24	13	92	CI around median	0.0005	0.005	Standard	No Exceedance
40	UA	E005	Chloride, total	mg/L	03/31/21 - 05/07/24	13	0	CB around linear reg	6.46	200	Standard	No Exceedance
40	UA	E005	Chromium, total	mg/L	03/31/21 - 05/07/24	13	100	All ND - Last	0.005	0.1	Standard	No Exceedance
40	UA	E005	Cobalt, total	mg/L	03/31/21 - 05/07/24	13	0	CI around mean	0.00535	0.006	Standard	No Exceedance
40	UA	E005	Fluoride, total	mg/L	03/31/21 - 05/07/24	13	85	CI around median	0.1	4.0	Standard	No Exceedance
40	UA	E005	Lead, total	mg/L	03/31/21 - 05/07/24	13	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
40	UA	E005	Lithium, total	mg/L	03/31/21 - 05/07/24	13	0	CI around median	0.76	0.04	Standard	Exceedance
40	UA	E005	Mercury, total	mg/L	03/31/21 - 05/07/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
40	UA	E005	Molybdenum, total	mg/L	03/31/21 - 05/07/24	13	0	CI around mean	0.058	0.1	Standard	No Exceedance
40	UA	E005	pH (field)	SU	03/31/21 - 05/07/24	12	0	CI around mean	6.4/6.6	6.5/9.0	Standard/Standard	No Exceedance
40	UA	E005	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 05/07/24	12	0	CI around mean	0.729	5	Standard	No Exceedance
40	UA	E005	Selenium, total	mg/L	03/31/21 - 05/07/24	13	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
40	UA	E005	Sulfate, total	mg/L	03/31/21 - 05/07/24	13	0	CB around linear reg	2,920	400	Standard	Exceedance
40	UA	E005	Thallium, total	mg/L	03/31/21 - 05/07/24	13	85	CI around median	0.002	0.002	Standard	No Exceedance
40	UA	E005	Total Dissolved Solids	mg/L	03/31/21 - 05/07/24	13	0	CI around mean	4,430	1,200	Standard	Exceedance
41	UA	E005	Antimony, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.003	0.006	Standard	No Exceedance
41	UA	E005	Arsenic, total	mg/L	03/30/21 - 05/08/24	13	0	CB around linear reg	0.0109	0.0600	Background	No Exceedance
41	UA	E005	Barium, total	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	0.231	2.0	Standard	No Exceedance
41	UA	E005	Beryllium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.001	0.004	Standard	No Exceedance
41	UA	E005	Boron, total	mg/L	03/30/21 - 05/08/24	13	0	CB around linear reg	2.92	2.45	Background	Exceedance
41	UA	E005	Cadmium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
41	UA	E005	Chloride, total	mg/L	03/30/21 - 05/08/24	13	0	CB around linear reg	46.2	200	Standard	No Exceedance
41	UA	E005	Chromium, total	mg/L	03/30/21 - 05/08/24	13	92	CI around median	0.0015	0.1	Standard	No Exceedance
41	UA	E005	Cobalt, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.001	0.006	Standard	No Exceedance
41	UA	E005	Fluoride, total	mg/L	03/30/21 - 05/08/24	13	8	CI around median	0.41	4.0	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
41	UA	E005	Lead, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
41	UA	E005	Lithium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.005	0.04	Standard	No Exceedance
41	UA	E005	Mercury, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
41	UA	E005	Molybdenum, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.005	0.1	Standard	No Exceedance
41	UA	E005	pH (field)	SU	03/30/21 - 05/08/24	13	0	CI around mean	7.0/7.2	6.5/9.0	Standard/Standard	No Exceedance
41	UA	E005	Radium 226 + Radium 228, total	pCi/L	04/20/21 - 05/08/24	11	0	CI around mean	1.12	5	Standard	No Exceedance
41	UA	E005	Selenium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
41	UA	E005	Sulfate, total	mg/L	03/30/21 - 05/08/24	13	85	CI around median	1	400	Standard	No Exceedance
41	UA	E005	Thallium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.002	0.002	Standard	No Exceedance
41	UA	E005	Total Dissolved Solids	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	604	1,200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 2, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Notes:

Compliance Result:

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

Exceedance: The statistical result exceeded the GWPS.

HSU = hydrostratigraphic unit:

LGU = Lower Groundwater Unit

UA = Uppermost Aquifer

mg/L = milligrams per liter

ND = non-detect

pCi/L = picocuries per liter

SU = standard units

Sample Count = number of samples from Sampled Date Range used to calculate the Statistical Result

Statistical Calculation = method used to calculate the statistical result:

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

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

CB around linear reg = Confidence band around linear regression

CI around geomean = Confidence interval around the geometric mean

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

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

Statistical Result = calculated in accordance with the Statistical Analysis Plan using constituent concentrations observed at each monitoring well during all sampling events within the specified date range

For pH, the values presented are the lower / upper limits

GWPS = Groundwater Protection Standard

GWPS Source:

Background = background concentration

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

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
02	LGU	E006	Antimony, total	mg/L	--	--	--	--	NS ²	0.006	Standard	--
02	LGU	E006	Arsenic, total	mg/L	--	--	--	--	NS ²	0.0600	Background	--
02	LGU	E006	Barium, total	mg/L	--	--	--	--	NS ²	2.0	Standard	--
02	LGU	E006	Beryllium, total	mg/L	--	--	--	--	NS ²	0.004	Standard	--
02	LGU	E006	Boron, total	mg/L	--	--	--	--	NS ²	2.45	Background	--
02	LGU	E006	Cadmium, total	mg/L	--	--	--	--	NS ²	0.005	Standard	--
02	LGU	E006	Chloride, total	mg/L	--	--	--	--	NS ²	200	Standard	--
02	LGU	E006	Chromium, total	mg/L	--	--	--	--	NS ²	0.1	Standard	--
02	LGU	E006	Cobalt, total	mg/L	--	--	--	--	NS ²	0.006	Standard	--
02	LGU	E006	Fluoride, total	mg/L	--	--	--	--	NS ²	4.0	Standard	--
02	LGU	E006	Lead, total	mg/L	--	--	--	--	NS ²	0.0075	Standard	--
02	LGU	E006	Lithium, total	mg/L	--	--	--	--	NS ²	0.04	Standard	--
02	LGU	E006	Mercury, total	mg/L	--	--	--	--	NS ²	0.002	Standard	--
02	LGU	E006	Molybdenum, total	mg/L	--	--	--	--	NS ²	0.1	Standard	--
02	LGU	E006	pH (field)	SU	--	--	--	--	NS ²	6.5/9.0	Standard/Standard	--
02	LGU	E006	Radium 226 + Radium 228, total	pCi/L	--	--	--	--	NS ²	5	Standard	--
02	LGU	E006	Selenium, total	mg/L	--	--	--	--	NS ²	0.05	Standard	--
02	LGU	E006	Sulfate, total	mg/L	--	--	--	--	NS ²	400	Standard	--
02	LGU	E006	Thallium, total	mg/L	--	--	--	--	NS ²	0.002	Standard	--
02	LGU	E006	Total Dissolved Solids	mg/L	--	--	--	--	NS ²	1,200	Standard	--
03R	LGU	E006	Antimony, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.003	0.006	Standard	No Exceedance
03R	LGU	E006	Arsenic, total	mg/L	03/30/21 - 07/31/24	14	0	CI around geomean	0.00508	0.0600	Background	No Exceedance
03R	LGU	E006	Barium, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	0.291	2.0	Standard	No Exceedance
03R	LGU	E006	Beryllium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.001	0.004	Standard	No Exceedance
03R	LGU	E006	Boron, total	mg/L	03/30/21 - 07/31/24	14	0	CB around linear reg	26.9	2.45	Background	Exceedance
03R	LGU	E006	Cadmium, total	mg/L	03/30/21 - 07/31/24	14	79	CI around median	0.0005	0.005	Standard	No Exceedance
03R	LGU	E006	Chloride, total	mg/L	03/30/21 - 07/31/24	14	2	CB around linear reg	21	200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
03R	LGU	E006	Chromium, total	mg/L	03/30/21 - 07/31/24	14	86	CB around T-S line	0.0015	0.1	Standard	No Exceedance
03R	LGU	E006	Cobalt, total	mg/L	03/30/21 - 07/31/24	14	86	CI around median	0.001	0.006	Standard	No Exceedance
03R	LGU	E006	Fluoride, total	mg/L	03/30/21 - 07/31/24	14	7	CI around mean	0.443	4.0	Standard	No Exceedance
03R	LGU	E006	Lead, total	mg/L	03/30/21 - 07/31/24	14	57	CI around median	0.001	0.0075	Standard	No Exceedance
03R	LGU	E006	Lithium, total	mg/L	03/30/21 - 07/31/24	14	86	CB around T-S line	0.003	0.04	Standard	No Exceedance
03R	LGU	E006	Mercury, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
03R	LGU	E006	Molybdenum, total	mg/L	03/30/21 - 07/31/24	14	0	CB around linear reg	0.328	0.1	Standard	Exceedance
03R	LGU	E006	pH (field)	SU	03/30/21 - 07/31/24	14	0	CI around mean	7.2/7.4	6.5/9.0	Standard/Standard	No Exceedance
03R	LGU	E006	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 07/31/24	12	0	CI around mean	1.07	5	Standard	No Exceedance
03R	LGU	E006	Selenium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
03R	LGU	E006	Sulfate, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	491	400	Standard	Exceedance
03R	LGU	E006	Thallium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.002	0.002	Standard	No Exceedance
03R	LGU	E006	Total Dissolved Solids	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	1,100	1,200	Standard	No Exceedance
04	UA	E006	Antimony, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.003	0.006	Standard	No Exceedance
04	UA	E006	Arsenic, total	mg/L	03/30/21 - 07/31/24	14	7	CI around geomean	0.0055	0.0600	Background	No Exceedance
04	UA	E006	Barium, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	0.222	2.0	Standard	No Exceedance
04	UA	E006	Beryllium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.001	0.004	Standard	No Exceedance
04	UA	E006	Boron, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	8.46	2.45	Background	Exceedance
04	UA	E006	Cadmium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
04	UA	E006	Chloride, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	10.2	200	Standard	No Exceedance
04	UA	E006	Chromium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.005	0.1	Standard	No Exceedance
04	UA	E006	Cobalt, total	mg/L	03/30/21 - 07/31/24	14	93	Most recent sample	0.001	0.006	Standard	No Exceedance
04	UA	E006	Fluoride, total	mg/L	03/30/21 - 07/31/24	14	7	CI around median	0.3	4.0	Standard	No Exceedance
04	UA	E006	Lead, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
04	UA	E006	Lithium, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	0.0463	0.04	Standard	Exceedance
04	UA	E006	Mercury, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
04	UA	E006	Molybdenum, total	mg/L	03/30/21 - 07/31/24	14	0	CB around linear reg	0.0334	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
04	UA	E006	pH (field)	SU	03/30/21 - 07/31/24	14	0	CI around mean	7.4/7.6	6.5/9.0	Standard/Standard	No Exceedance
04	UA	E006	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 07/31/24	12	0	CI around mean	0.735	5	Standard	No Exceedance
04	UA	E006	Selenium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
04	UA	E006	Sulfate, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	34.4	400	Standard	No Exceedance
04	UA	E006	Thallium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.002	0.002	Standard	No Exceedance
04	UA	E006	Total Dissolved Solids	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	367	1,200	Standard	No Exceedance
05	UA	E006	Antimony, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.003	0.006	Standard	No Exceedance
05	UA	E006	Arsenic, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.001	0.0600	Background	No Exceedance
05	UA	E006	Barium, total	mg/L	03/30/21 - 08/01/24	14	0	CI around mean	0.0225	2.0	Standard	No Exceedance
05	UA	E006	Beryllium, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.001	0.004	Standard	No Exceedance
05	UA	E006	Boron, total	mg/L	03/30/21 - 08/01/24	14	0	CI around mean	18	2.45	Background	Exceedance
05	UA	E006	Cadmium, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
05	UA	E006	Chloride, total	mg/L	03/30/21 - 08/01/24	14	2	CI around mean	7.44	200	Standard	No Exceedance
05	UA	E006	Chromium, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.005	0.1	Standard	No Exceedance
05	UA	E006	Cobalt, total	mg/L	03/30/21 - 08/01/24	14	86	CI around median	0.001	0.006	Standard	No Exceedance
05	UA	E006	Fluoride, total	mg/L	03/30/21 - 08/01/24	14	7	CB around linear reg	0.568	4.0	Standard	No Exceedance
05	UA	E006	Lead, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
05	UA	E006	Lithium, total	mg/L	03/30/21 - 08/01/24	14	0	CI around mean	0.0866	0.04	Standard	Exceedance
05	UA	E006	Mercury, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
05	UA	E006	Molybdenum, total	mg/L	03/30/21 - 08/01/24	14	0	CB around linear reg	0.0402	0.1	Standard	No Exceedance
05	UA	E006	pH (field)	SU	03/30/21 - 08/01/24	14	0	CB around linear reg	7.4/7.8	6.5/9.0	Standard/Standard	No Exceedance
05	UA	E006	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 08/01/24	12	0	CI around geomean	0.105	5	Standard	No Exceedance
05	UA	E006	Selenium, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
05	UA	E006	Sulfate, total	mg/L	03/30/21 - 08/01/24	14	0	CI around median	224	400	Standard	No Exceedance
05	UA	E006	Thallium, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.002	0.002	Standard	No Exceedance
05	UA	E006	Total Dissolved Solids	mg/L	03/30/21 - 08/01/24	14	0	CI around mean	534	1,200	Standard	No Exceedance
07R	UA	E006	Antimony, total	mg/L	--	--	--	--	NS ²	0.006	Standard	--

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
07R	UA	E006	Arsenic, total	mg/L	--	--	--	--	NS ²	0.0600	Background	--
07R	UA	E006	Barium, total	mg/L	--	--	--	--	NS ²	2.0	Standard	--
07R	UA	E006	Beryllium, total	mg/L	--	--	--	--	NS ²	0.004	Standard	--
07R	UA	E006	Boron, total	mg/L	--	--	--	--	NS ²	2.45	Background	--
07R	UA	E006	Cadmium, total	mg/L	--	--	--	--	NS ²	0.005	Standard	--
07R	UA	E006	Chloride, total	mg/L	--	--	--	--	NS ²	200	Standard	--
07R	UA	E006	Chromium, total	mg/L	--	--	--	--	NS ²	0.1	Standard	--
07R	UA	E006	Cobalt, total	mg/L	--	--	--	--	NS ²	0.006	Standard	--
07R	UA	E006	Fluoride, total	mg/L	--	--	--	--	NS ²	4.0	Standard	--
07R	UA	E006	Lead, total	mg/L	--	--	--	--	NS ²	0.0075	Standard	--
07R	UA	E006	Lithium, total	mg/L	--	--	--	--	NS ²	0.04	Standard	--
07R	UA	E006	Mercury, total	mg/L	--	--	--	--	NS ²	0.002	Standard	--
07R	UA	E006	Molybdenum, total	mg/L	--	--	--	--	NS ²	0.1	Standard	--
07R	UA	E006	pH (field)	SU	--	--	--	--	NS ²	6.5/9.0	Standard/Standard	--
07R	UA	E006	Radium 226 + Radium 228, total	pCi/L	--	--	--	--	NS ²	5	Standard	--
07R	UA	E006	Selenium, total	mg/L	--	--	--	--	NS ²	0.05	Standard	--
07R	UA	E006	Sulfate, total	mg/L	--	--	--	--	NS ²	400	Standard	--
07R	UA	E006	Thallium, total	mg/L	--	--	--	--	NS ²	0.002	Standard	--
07R	UA	E006	Total Dissolved Solids	mg/L	--	--	--	--	NS ²	1,200	Standard	--
08R	UA	E006	Antimony, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.003	0.006	Standard	No Exceedance
08R	UA	E006	Arsenic, total	mg/L	03/30/21 - 07/31/24	14	0	CB around linear reg	0.0282	0.0600	Background	No Exceedance
08R	UA	E006	Barium, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	0.0556	2.0	Standard	No Exceedance
08R	UA	E006	Beryllium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.001	0.004	Standard	No Exceedance
08R	UA	E006	Boron, total	mg/L	03/30/21 - 07/31/24	14	0	CI around median	29.8	2.45	Background	Exceedance
08R	UA	E006	Cadmium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
08R	UA	E006	Chloride, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	5.1	200	Standard	No Exceedance
08R	UA	E006	Chromium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.005	0.1	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
08R	UA	E006	Cobalt, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.001	0.006	Standard	No Exceedance
08R	UA	E006	Fluoride, total	mg/L	03/30/21 - 07/31/24	14	79	CI around median	0.1	4.0	Standard	No Exceedance
08R	UA	E006	Lead, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
08R	UA	E006	Lithium, total	mg/L	03/30/21 - 07/31/24	14	0	CI around median	0.288	0.04	Standard	Exceedance
08R	UA	E006	Mercury, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
08R	UA	E006	Molybdenum, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	0.197	0.1	Standard	Exceedance
08R	UA	E006	pH (field)	SU	03/30/21 - 07/31/24	14	0	CI around mean	7.1/7.9	6.5/9.0	Standard/Standard	No Exceedance
08R	UA	E006	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 07/31/24	12	0	CI around mean	0.443	5	Standard	No Exceedance
08R	UA	E006	Selenium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
08R	UA	E006	Sulfate, total	mg/L	03/30/21 - 07/31/24	14	0	CB around linear reg	578	400	Standard	Exceedance
08R	UA	E006	Thallium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.002	0.002	Standard	No Exceedance
08R	UA	E006	Total Dissolved Solids	mg/L	03/30/21 - 07/31/24	14	0	CI around median	1,110	1,200	Standard	No Exceedance
17	UA	E006	Antimony, total	mg/L	--	--	--	--	NS ²	0.006	Standard	--
17	UA	E006	Arsenic, total	mg/L	--	--	--	--	NS ²	0.0600	Background	--
17	UA	E006	Barium, total	mg/L	--	--	--	--	NS ²	2.0	Standard	--
17	UA	E006	Beryllium, total	mg/L	--	--	--	--	NS ²	0.004	Standard	--
17	UA	E006	Boron, total	mg/L	--	--	--	--	NS ²	2.45	Background	--
17	UA	E006	Cadmium, total	mg/L	--	--	--	--	NS ²	0.005	Standard	--
17	UA	E006	Chloride, total	mg/L	--	--	--	--	NS ²	200	Standard	--
17	UA	E006	Chromium, total	mg/L	--	--	--	--	NS ²	0.1	Standard	--
17	UA	E006	Cobalt, total	mg/L	--	--	--	--	NS ²	0.006	Standard	--
17	UA	E006	Fluoride, total	mg/L	--	--	--	--	NS ²	4.0	Standard	--
17	UA	E006	Lead, total	mg/L	--	--	--	--	NS ²	0.0075	Standard	--
17	UA	E006	Lithium, total	mg/L	--	--	--	--	NS ²	0.04	Standard	--
17	UA	E006	Mercury, total	mg/L	--	--	--	--	NS ²	0.002	Standard	--
17	UA	E006	Molybdenum, total	mg/L	--	--	--	--	NS ²	0.1	Standard	--
17	UA	E006	pH (field)	SU	--	--	--	--	NS ²	6.5/9.0	Standard/Standard	--

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
17	UA	E006	Radium 226 + Radium 228, total	pCi/L	--	--	--	--	NS ²	5	Standard	--
17	UA	E006	Selenium, total	mg/L	--	--	--	--	NS ²	0.05	Standard	--
17	UA	E006	Sulfate, total	mg/L	--	--	--	--	NS ²	400	Standard	--
17	UA	E006	Thallium, total	mg/L	--	--	--	--	NS ²	0.002	Standard	--
17	UA	E006	Total Dissolved Solids	mg/L	--	--	--	--	NS ²	1,200	Standard	--
20	UA	E006	Antimony, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.003	0.006	Standard	No Exceedance
20	UA	E006	Arsenic, total	mg/L	03/30/21 - 07/31/24	14	64	CI around median	0.001	0.0600	Background	No Exceedance
20	UA	E006	Barium, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	0.018	2.0	Standard	No Exceedance
20	UA	E006	Beryllium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.001	0.004	Standard	No Exceedance
20	UA	E006	Boron, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	0.745	2.45	Background	No Exceedance
20	UA	E006	Cadmium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
20	UA	E006	Chloride, total	mg/L	03/30/21 - 07/31/24	14	14	CI around median	4	200	Standard	No Exceedance
20	UA	E006	Chromium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.005	0.1	Standard	No Exceedance
20	UA	E006	Cobalt, total	mg/L	03/30/21 - 07/31/24	14	86	CI around median	0.001	0.006	Standard	No Exceedance
20	UA	E006	Fluoride, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.1	4.0	Standard	No Exceedance
20	UA	E006	Lead, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
20	UA	E006	Lithium, total	mg/L	03/30/21 - 07/31/24	14	0	CI around geomean	0.0205	0.04	Standard	No Exceedance
20	UA	E006	Mercury, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
20	UA	E006	Molybdenum, total	mg/L	03/30/21 - 07/31/24	14	93	CB around T-S line	0.0015	0.1	Standard	No Exceedance
20	UA	E006	pH (field)	SU	03/30/21 - 07/31/24	14	0	CI around median	6.9/7.1	6.5/9.0	Standard/Standard	No Exceedance
20	UA	E006	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 07/31/24	12	0	CI around mean	0.453	5	Standard	No Exceedance
20	UA	E006	Selenium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
20	UA	E006	Sulfate, total	mg/L	03/30/21 - 07/31/24	14	0	CI around geomean	75.5	400	Standard	No Exceedance
20	UA	E006	Thallium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.002	0.002	Standard	No Exceedance
20	UA	E006	Total Dissolved Solids	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	407	1,200	Standard	No Exceedance
34	LGU	E006	Antimony, total	mg/L	--	--	--	--	NS ⁷	0.006	Standard	--
34	LGU	E006	Arsenic, total	mg/L	--	--	--	--	NS ⁷	0.0600	Background	--

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
34	LGU	E006	Barium, total	mg/L	--	--	--	--	NS ⁷	2.0	Standard	--
34	LGU	E006	Beryllium, total	mg/L	--	--	--	--	NS ⁷	0.004	Standard	--
34	LGU	E006	Boron, total	mg/L	--	--	--	--	NS ⁷	2.45	Background	--
34	LGU	E006	Cadmium, total	mg/L	--	--	--	--	NS ⁷	0.005	Standard	--
34	LGU	E006	Chloride, total	mg/L	--	--	--	--	NS ⁷	200	Standard	--
34	LGU	E006	Chromium, total	mg/L	--	--	--	--	NS ⁷	0.1	Standard	--
34	LGU	E006	Cobalt, total	mg/L	--	--	--	--	NS ⁷	0.006	Standard	--
34	LGU	E006	Fluoride, total	mg/L	--	--	--	--	NS ⁷	4.0	Standard	--
34	LGU	E006	Lead, total	mg/L	--	--	--	--	NS ⁷	0.0075	Standard	--
34	LGU	E006	Lithium, total	mg/L	--	--	--	--	NS ⁷	0.04	Standard	--
34	LGU	E006	Mercury, total	mg/L	--	--	--	--	NS ⁷	0.002	Standard	--
34	LGU	E006	Molybdenum, total	mg/L	--	--	--	--	NS ⁷	0.1	Standard	--
34	LGU	E006	pH (field)	SU	--	--	--	--	NS ⁷	6.5/9.0	Standard/Standard	--
34	LGU	E006	Radium 226 + Radium 228, total	pCi/L	--	--	--	--	NS ⁷	5	Standard	--
34	LGU	E006	Selenium, total	mg/L	--	--	--	--	NS ⁷	0.05	Standard	--
34	LGU	E006	Sulfate, total	mg/L	--	--	--	--	NS ⁷	400	Standard	--
34	LGU	E006	Thallium, total	mg/L	--	--	--	--	NS ⁷	0.002	Standard	--
34	LGU	E006	Total Dissolved Solids	mg/L	--	--	--	--	NS ⁷	1,200	Standard	--
36	UA	E006	Antimony, total	mg/L	--	--	--	--	NS ²	0.006	Standard	--
36	UA	E006	Arsenic, total	mg/L	--	--	--	--	NS ²	0.0600	Background	--
36	UA	E006	Barium, total	mg/L	--	--	--	--	NS ²	2.0	Standard	--
36	UA	E006	Beryllium, total	mg/L	--	--	--	--	NS ²	0.004	Standard	--
36	UA	E006	Boron, total	mg/L	--	--	--	--	NS ²	2.45	Background	--
36	UA	E006	Cadmium, total	mg/L	--	--	--	--	NS ²	0.005	Standard	--
36	UA	E006	Chloride, total	mg/L	--	--	--	--	NS ²	200	Standard	--
36	UA	E006	Chromium, total	mg/L	--	--	--	--	NS ²	0.1	Standard	--
36	UA	E006	Cobalt, total	mg/L	--	--	--	--	NS ²	0.006	Standard	--

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
36	UA	E006	Fluoride, total	mg/L	--	--	--	--	NS ²	4.0	Standard	--
36	UA	E006	Lead, total	mg/L	--	--	--	--	NS ²	0.0075	Standard	--
36	UA	E006	Lithium, total	mg/L	--	--	--	--	NS ²	0.04	Standard	--
36	UA	E006	Mercury, total	mg/L	--	--	--	--	NS ²	0.002	Standard	--
36	UA	E006	Molybdenum, total	mg/L	--	--	--	--	NS ²	0.1	Standard	--
36	UA	E006	pH (field)	SU	--	--	--	--	NS ²	6.5/9.0	Standard/Standard	--
36	UA	E006	Radium 226 + Radium 228, total	pCi/L	--	--	--	--	NS ²	5	Standard	--
36	UA	E006	Selenium, total	mg/L	--	--	--	--	NS ²	0.05	Standard	--
36	UA	E006	Sulfate, total	mg/L	--	--	--	--	NS ²	400	Standard	--
36	UA	E006	Thallium, total	mg/L	--	--	--	--	NS ²	0.002	Standard	--
36	UA	E006	Total Dissolved Solids	mg/L	--	--	--	--	NS ²	1,200	Standard	--
37	LGU	E006	Antimony, total	mg/L	--	--	--	--	NS ²	0.006	Standard	--
37	LGU	E006	Arsenic, total	mg/L	--	--	--	--	NS ²	0.0600	Background	--
37	LGU	E006	Barium, total	mg/L	--	--	--	--	NS ²	2.0	Standard	--
37	LGU	E006	Beryllium, total	mg/L	--	--	--	--	NS ²	0.004	Standard	--
37	LGU	E006	Boron, total	mg/L	--	--	--	--	NS ²	2.45	Background	--
37	LGU	E006	Cadmium, total	mg/L	--	--	--	--	NS ²	0.005	Standard	--
37	LGU	E006	Chloride, total	mg/L	--	--	--	--	NS ²	200	Standard	--
37	LGU	E006	Chromium, total	mg/L	--	--	--	--	NS ²	0.1	Standard	--
37	LGU	E006	Cobalt, total	mg/L	--	--	--	--	NS ²	0.006	Standard	--
37	LGU	E006	Fluoride, total	mg/L	--	--	--	--	NS ²	4.0	Standard	--
37	LGU	E006	Lead, total	mg/L	--	--	--	--	NS ²	0.0075	Standard	--
37	LGU	E006	Lithium, total	mg/L	--	--	--	--	NS ²	0.04	Standard	--
37	LGU	E006	Mercury, total	mg/L	--	--	--	--	NS ²	0.002	Standard	--
37	LGU	E006	Molybdenum, total	mg/L	--	--	--	--	NS ²	0.1	Standard	--
37	LGU	E006	pH (field)	SU	--	--	--	--	NS ²	6.5/9.0	Standard/Standard	--
37	LGU	E006	Radium 226 + Radium 228, total	pCi/L	--	--	--	--	NS ²	5	Standard	--

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
37	LGU	E006	Selenium, total	mg/L	--	--	--	--	NS ²	0.05	Standard	--
37	LGU	E006	Sulfate, total	mg/L	--	--	--	--	NS ²	400	Standard	--
37	LGU	E006	Thallium, total	mg/L	--	--	--	--	NS ²	0.002	Standard	--
37	LGU	E006	Total Dissolved Solids	mg/L	--	--	--	--	NS ²	1,200	Standard	--
38	UA	E006	Antimony, total	mg/L	03/30/21 - 07/30/24	14	100	All ND - Last	0.003	0.006	Standard	No Exceedance
38	UA	E006	Arsenic, total	mg/L	03/30/21 - 07/30/24	14	0	CB around linear reg	0.0286	0.0600	Background	No Exceedance
38	UA	E006	Barium, total	mg/L	03/30/21 - 07/30/24	14	0	CB around T-S line	-0.0626	2.0	Standard	No Exceedance
38	UA	E006	Beryllium, total	mg/L	03/30/21 - 07/30/24	14	100	All ND - Last	0.001	0.004	Standard	No Exceedance
38	UA	E006	Boron, total	mg/L	03/30/21 - 07/30/24	14	0	CI around geomean	0.422	2.45	Background	No Exceedance
38	UA	E006	Cadmium, total	mg/L	03/30/21 - 07/30/24	14	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
38	UA	E006	Chloride, total	mg/L	03/30/21 - 07/30/24	14	0	CB around linear reg	13.6	200	Standard	No Exceedance
38	UA	E006	Chromium, total	mg/L	03/30/21 - 07/30/24	14	100	All ND - Last	0.005	0.1	Standard	No Exceedance
38	UA	E006	Cobalt, total	mg/L	03/30/21 - 07/30/24	14	100	All ND - Last	0.001	0.006	Standard	No Exceedance
38	UA	E006	Fluoride, total	mg/L	03/30/21 - 07/30/24	14	7	CI around geomean	0.352	4.0	Standard	No Exceedance
38	UA	E006	Lead, total	mg/L	03/30/21 - 07/30/24	14	93	CI around median	0.0005	0.0075	Standard	No Exceedance
38	UA	E006	Lithium, total	mg/L	03/30/21 - 07/30/24	14	57	CI around median	0.003	0.04	Standard	No Exceedance
38	UA	E006	Mercury, total	mg/L	03/30/21 - 07/30/24	14	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
38	UA	E006	Molybdenum, total	mg/L	03/30/21 - 07/30/24	14	43	CI around mean	0.00245	0.1	Standard	No Exceedance
38	UA	E006	pH (field)	SU	03/30/21 - 07/30/24	14	0	CI around mean	6.9/7.1	6.5/9.0	Standard/Standard	No Exceedance
38	UA	E006	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 07/30/24	12	0	CI around mean	1.03	5	Standard	No Exceedance
38	UA	E006	Selenium, total	mg/L	03/30/21 - 07/30/24	14	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
38	UA	E006	Sulfate, total	mg/L	03/30/21 - 07/30/24	14	93	CB around T-S line	-1.49	400	Standard	No Exceedance
38	UA	E006	Thallium, total	mg/L	03/30/21 - 07/30/24	14	100	All ND - Last	0.002	0.002	Standard	No Exceedance
38	UA	E006	Total Dissolved Solids	mg/L	03/30/21 - 07/30/24	14	0	CI around mean	506	1,200	Standard	No Exceedance
41	UA	E006	Antimony, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.003	0.006	Standard	No Exceedance
41	UA	E006	Arsenic, total	mg/L	03/30/21 - 07/29/24	14	0	CB around linear reg	0.0103	0.0600	Background	No Exceedance
41	UA	E006	Barium, total	mg/L	03/30/21 - 07/29/24	14	0	CI around mean	0.232	2.0	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
41	UA	E006	Beryllium, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.001	0.004	Standard	No Exceedance
41	UA	E006	Boron, total	mg/L	03/30/21 - 07/29/24	14	0	CB around linear reg	3.01	2.45	Background	Exceedance
41	UA	E006	Cadmium, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.0005	0.005	Standard	No Exceedance
41	UA	E006	Chloride, total	mg/L	03/30/21 - 07/29/24	14	0	CB around linear reg	45.5	200	Standard	No Exceedance
41	UA	E006	Chromium, total	mg/L	03/30/21 - 07/29/24	14	93	CI around median	0.0015	0.1	Standard	No Exceedance
41	UA	E006	Cobalt, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.001	0.006	Standard	No Exceedance
41	UA	E006	Fluoride, total	mg/L	03/30/21 - 07/29/24	14	7	CI around median	0.41	4.0	Standard	No Exceedance
41	UA	E006	Lead, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
41	UA	E006	Lithium, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.005	0.04	Standard	No Exceedance
41	UA	E006	Mercury, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
41	UA	E006	Molybdenum, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.005	0.1	Standard	No Exceedance
41	UA	E006	pH (field)	SU	03/30/21 - 07/29/24	14	0	CI around mean	7.0/7.2	6.5/9.0	Standard/Standard	No Exceedance
41	UA	E006	Radium 226 + Radium 228, total	pCi/L	04/20/21 - 07/29/24	12	0	CI around mean	1.12	5	Standard	No Exceedance
41	UA	E006	Selenium, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
41	UA	E006	Sulfate, total	mg/L	03/30/21 - 07/29/24	14	86	CI around median	1	400	Standard	No Exceedance
41	UA	E006	Thallium, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.002	0.002	Standard	No Exceedance
41	UA	E006	Total Dissolved Solids	mg/L	03/30/21 - 07/29/24	14	0	CI around mean	605	1,200	Standard	No Exceedance

TABLE 2.
EVALUATION OF COMPLIANCE - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Notes:

Compliance Result:

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

Exceedance: The statistical result exceeded the GWPS.

HSU = hydrostratigraphic unit:

LGU = Lower Groundwater Unit

UA = Uppermost Aquifer

mg/L = milligrams per liter

Missing Code (if applicable):

NR¹ = Select parameters were not analyzed.

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

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

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

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

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

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

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

PM¹ = Select parameters were not analyzed as the well purged dry during sample collection and did not sufficiently recover to sample for all parameters.

ND = non-detect

pCi/L = picocuries per liter

SU = standard units

Sample Count = number of samples from Sampled Date Range used to calculate the Statistical Result

Statistical Calculation = method used to calculate the statistical result:

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

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

CB around linear reg = Confidence band around linear regression

CI around geomean = Confidence interval around the geometric mean

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

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

Statistical Result = calculated in accordance with the Statistical Analysis Plan using constituent concentrations observed at each monitoring well during all sampling events within the specified date range

For pH, the values presented are the lower / upper limits

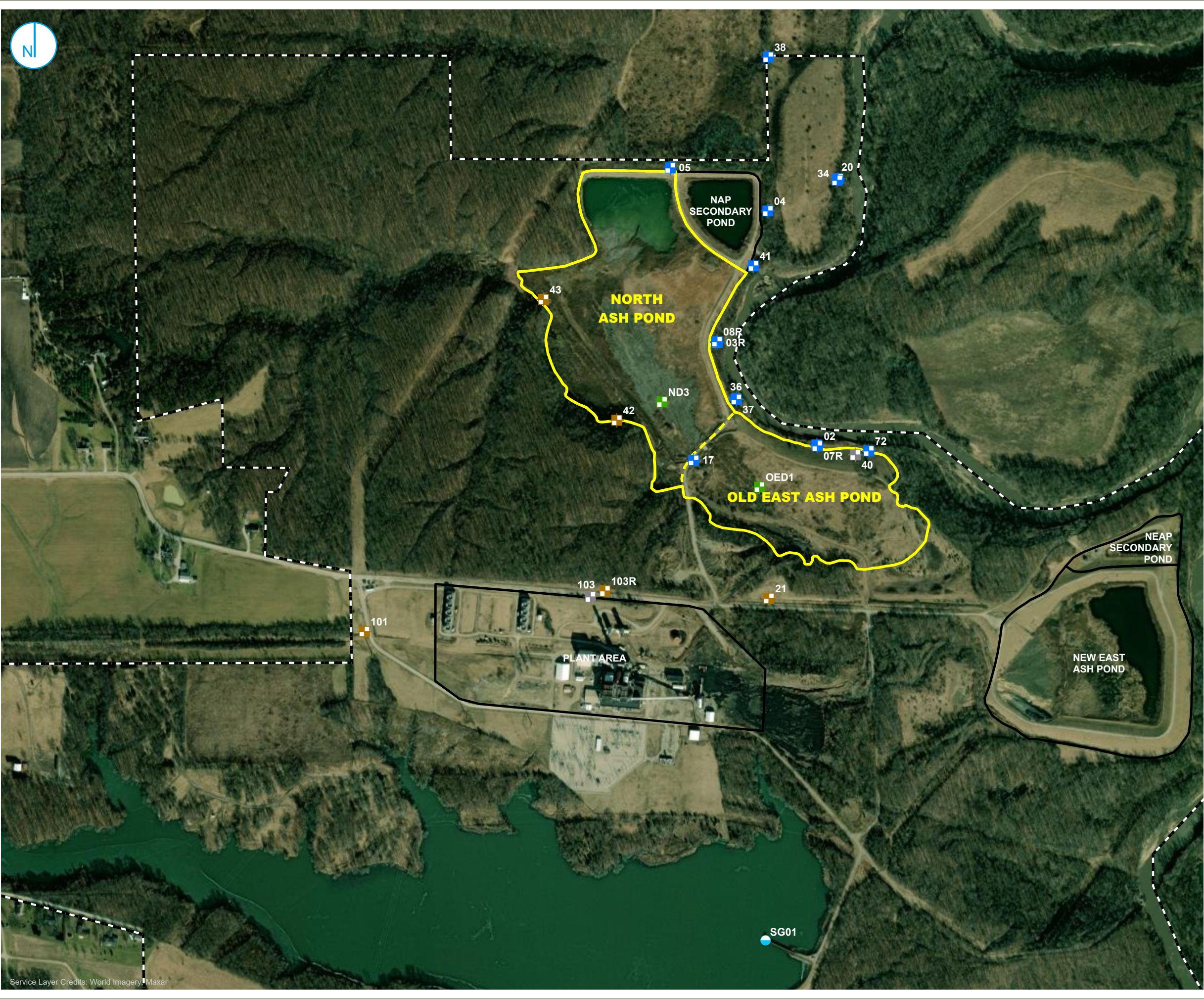
GWPS = Groundwater Protection Standard

GWPS Source:

Background = background concentration

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

FIGURES



- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- STAFF GAGE, RIVER
- CLOSED MONITORING WELL
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

NOTE:
MONITORING WELL 40 WAS CLOSED ON JUNE 4, 2024.
MONITORING WELL 72 WAS INSTALLED ON DECEMBER 4, 2024. THE LOCATION IS APPROXIMATE.
MONITORING WELL 103 WAS CLOSED ON DECMEBER 3, 2024.
MONITORING WELL 103R WAS INSTALLED ON NOVEMBER 20, 2024. THE LOCATION IS APPROXIMATE.

0 300 600
Feet

MONITORING WELL LOCATION
MAP

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
NEW EAST ASH POND
VERMILION POWER PLANT
OAKWOOD, ILLINOIS

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- TOTAL BORON EXCEEDANCE
- TOTAL LITHIUM EXCEEDANCE
- TOTAL MOLYBDENUM EXCEEDANCE
- TOTAL SULFATE EXCEEDANCE
- TOTAL DISSOLVED SOLIDS EXCEEDANCE
- COMPLIANCE WELL WITHOUT EXCEEDANCE
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

0 200 400 Feet

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

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
NORTH ASH POND AND OLD EAST ASH POND
VERMILION POWER PLANT
OAKWOOD, ILLINOIS

FIGURE 2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- TOTAL BORON EXCEEDANCE
- TOTAL MOLYBDENUM EXCEEDANCE
- TOTAL SULFATE EXCEEDANCE
- COMPLIANCE WELL WITHOUT EXCEEDANCE
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

0 200 400 Feet

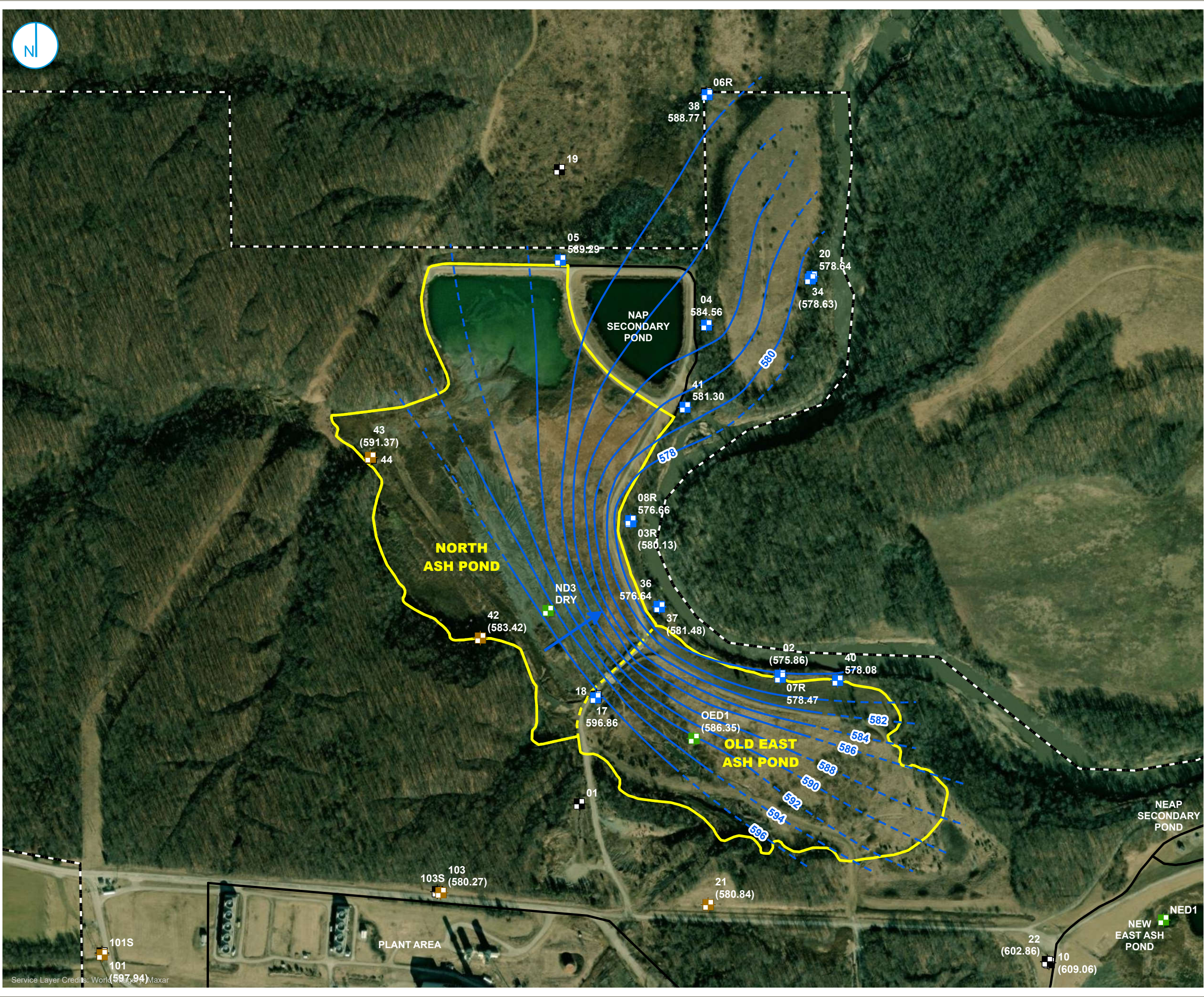
GWPS EXCEEDANCE MAP
LOWER GROUNDWATER UNIT
QUARTER 4, 2023 AND
QUARTERS 1-3, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
NORTH ASH POND AND OLD EAST ASH POND
VERMILION POWER PLANT
OAKWOOD, ILLINOIS

FIGURE 3

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





POTENTIOMETRIC SURFACE MAP
JANUARY 24, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
NORTH ASH POND AND OLD EAST ASH POND
VERMILION POWER PLANT
OAKWOOD, ILLINOIS

FIGURE 4

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



PROJECT: 169000XXXX | DATED: 7/19/2024 | DESIGNER: GALARNMC
Y:\Mapping\Projects\22\2285\MXD\GW_Contours\Round_2024\Vermlion\NAPS_OEAP_910_911\NAPS_OEAP_2024.aprx | VER 910 911 NAPS OEAP Pot Surface 20240219





- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

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

0 200 400
Feet

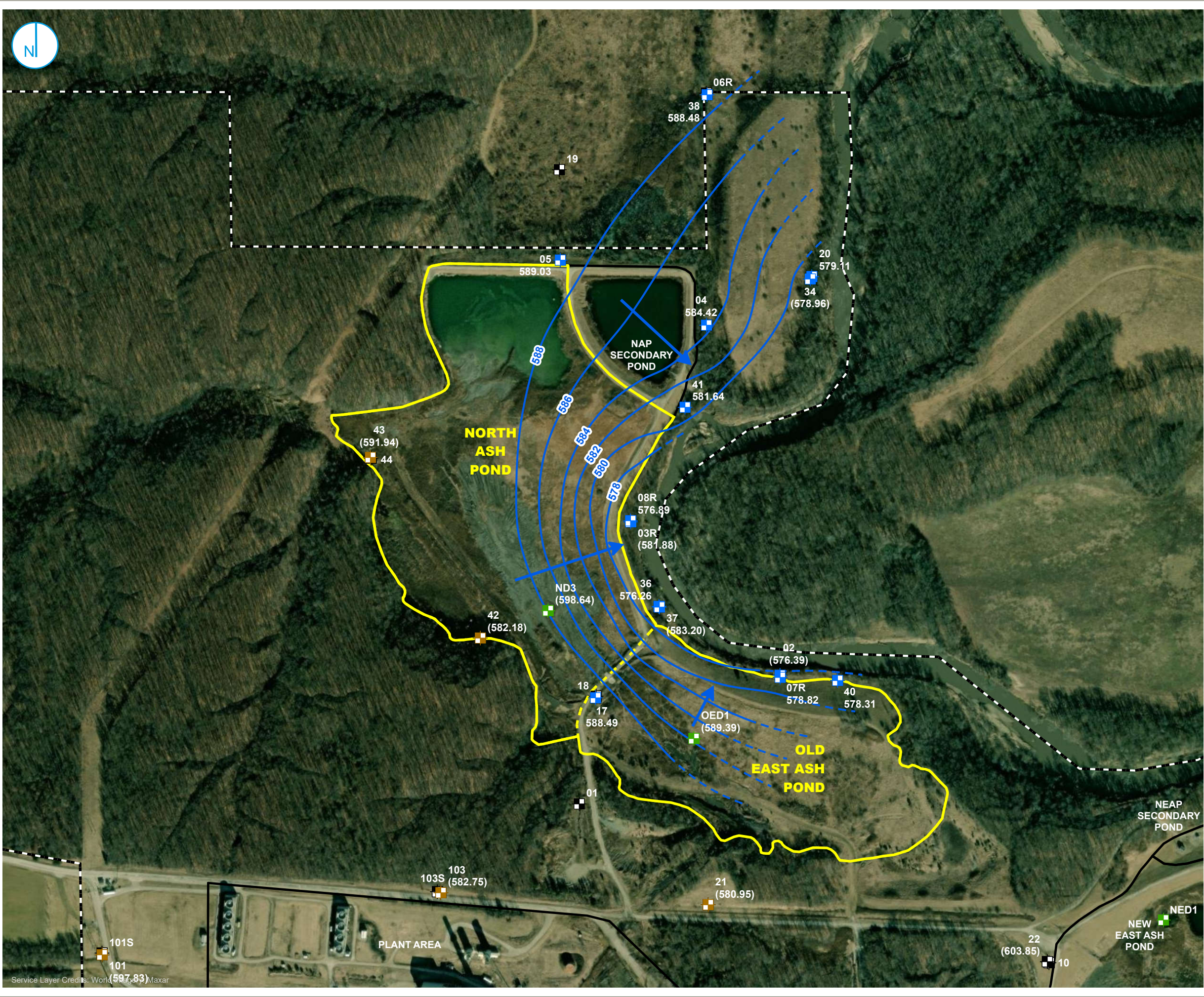
POTENTIOMETRIC SURFACE MAP MARCH 6, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
NORTH ASH POND AND OLD EAST ASH POND
VERMILION POWER PLANT
OAKWOOD, ILLINOIS

FIGURE 6

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

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

0 200 400
Feet

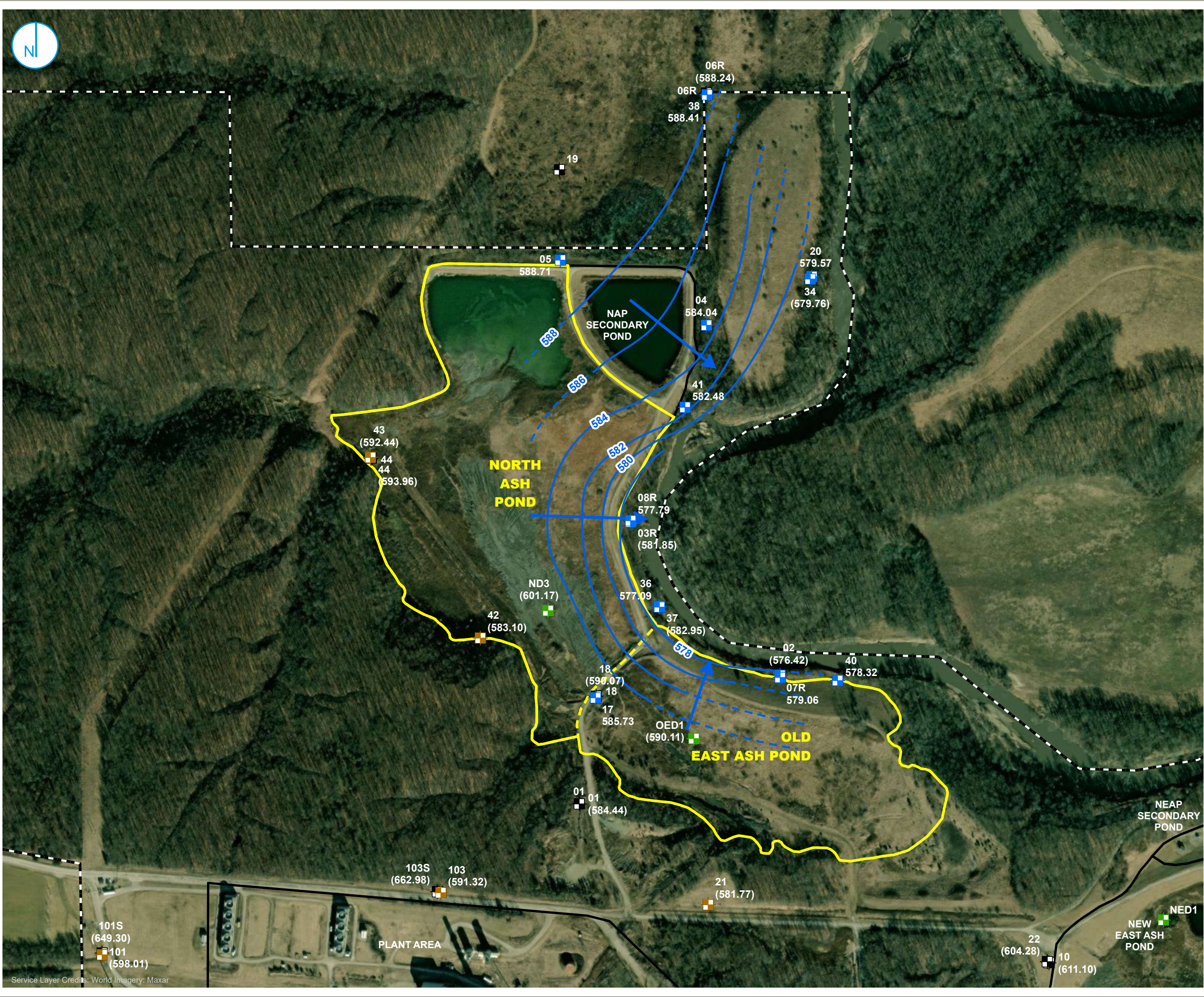
POTENTIOMETRIC SURFACE MAP
APRIL 6, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
NORTH ASH POND AND OLD EAST ASH POND
VERMILION POWER PLANT
OAKWOOD, ILLINOIS

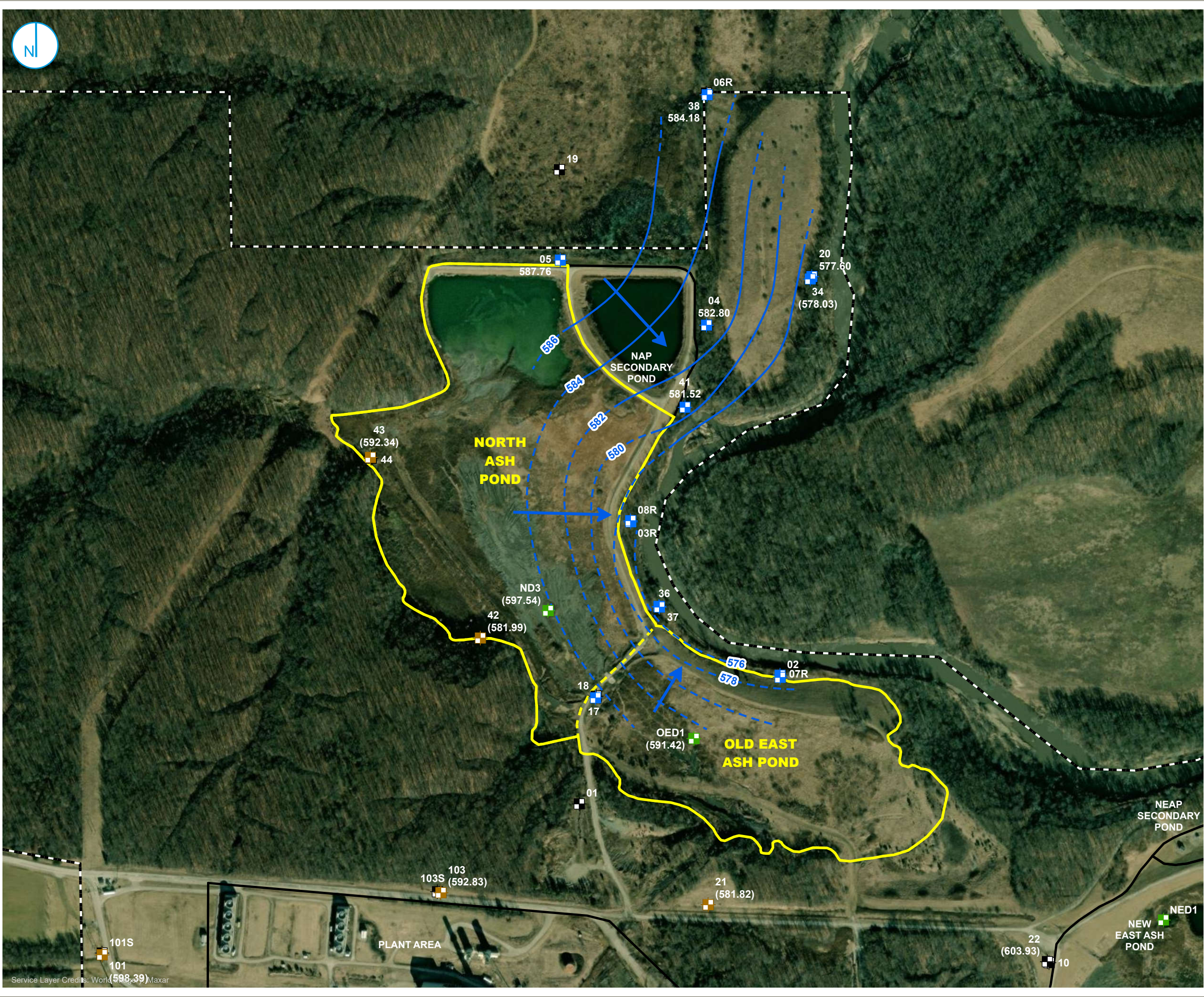
FIGURE 7

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



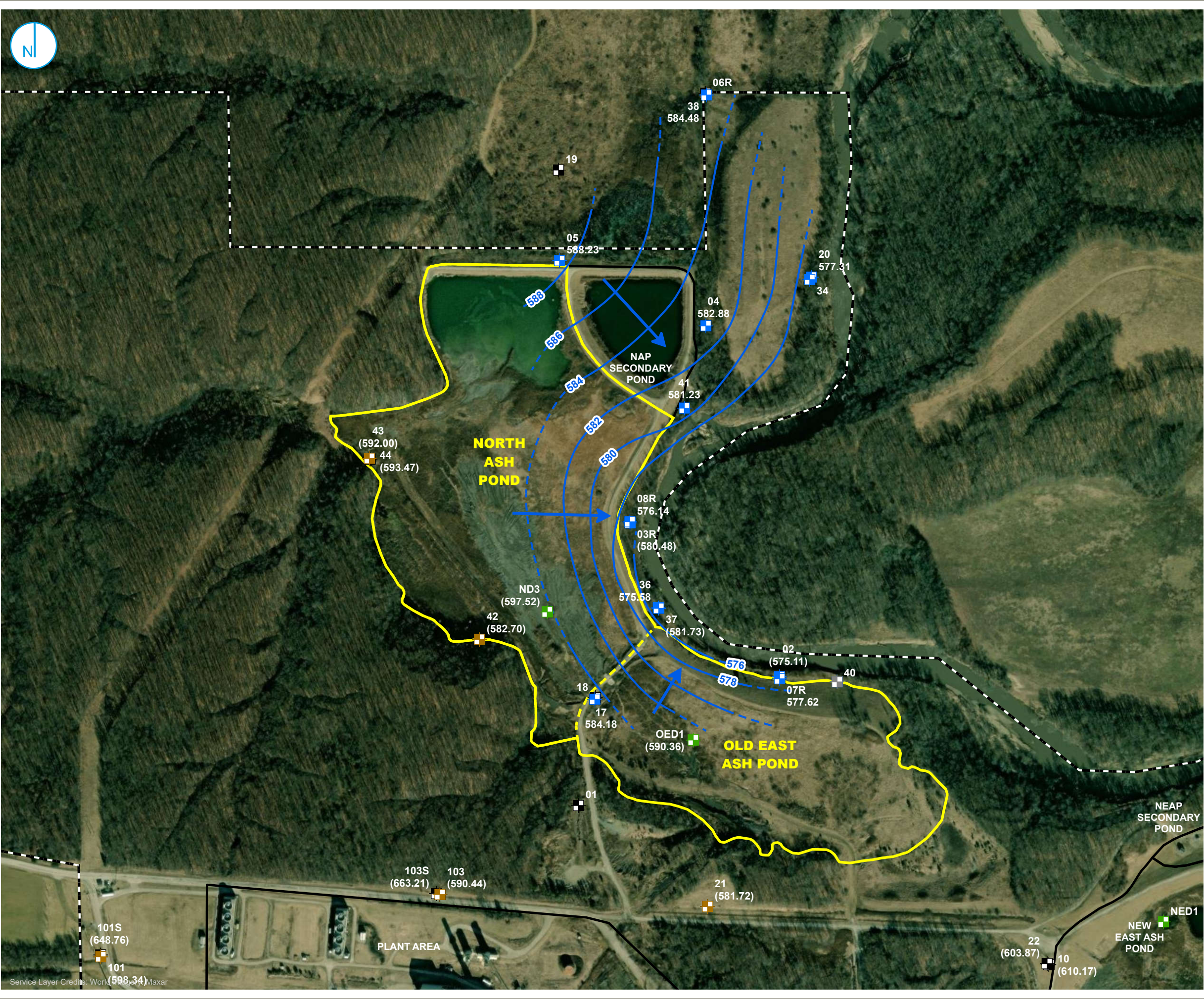


PROJECT: 169000XXXX | DATED: 11/1/2024 | DESIGNER: GALARNMC
Y:\Mapping\Projects\22\2285\MXD\GW_Contours\Round_2024\Vermillion\NAPS_OEAP_910_911\NAPS_OEAP_2024.aprx\VER 910 911 NAPS OEAP Pot Surface 20240629



RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- MONITORING WELL
- CLOSED MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

NOTES:
1. ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
2. ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. COMPLIANCE MONITORING WELL 40 WAS ABANDONED DUE TO CONSTRUCTION ACTIVITY FOR THE GROUNDWATER EXTRACTION TRENCH.



**POTENTIOMETRIC SURFACE MAP
JULY 29, 2024**

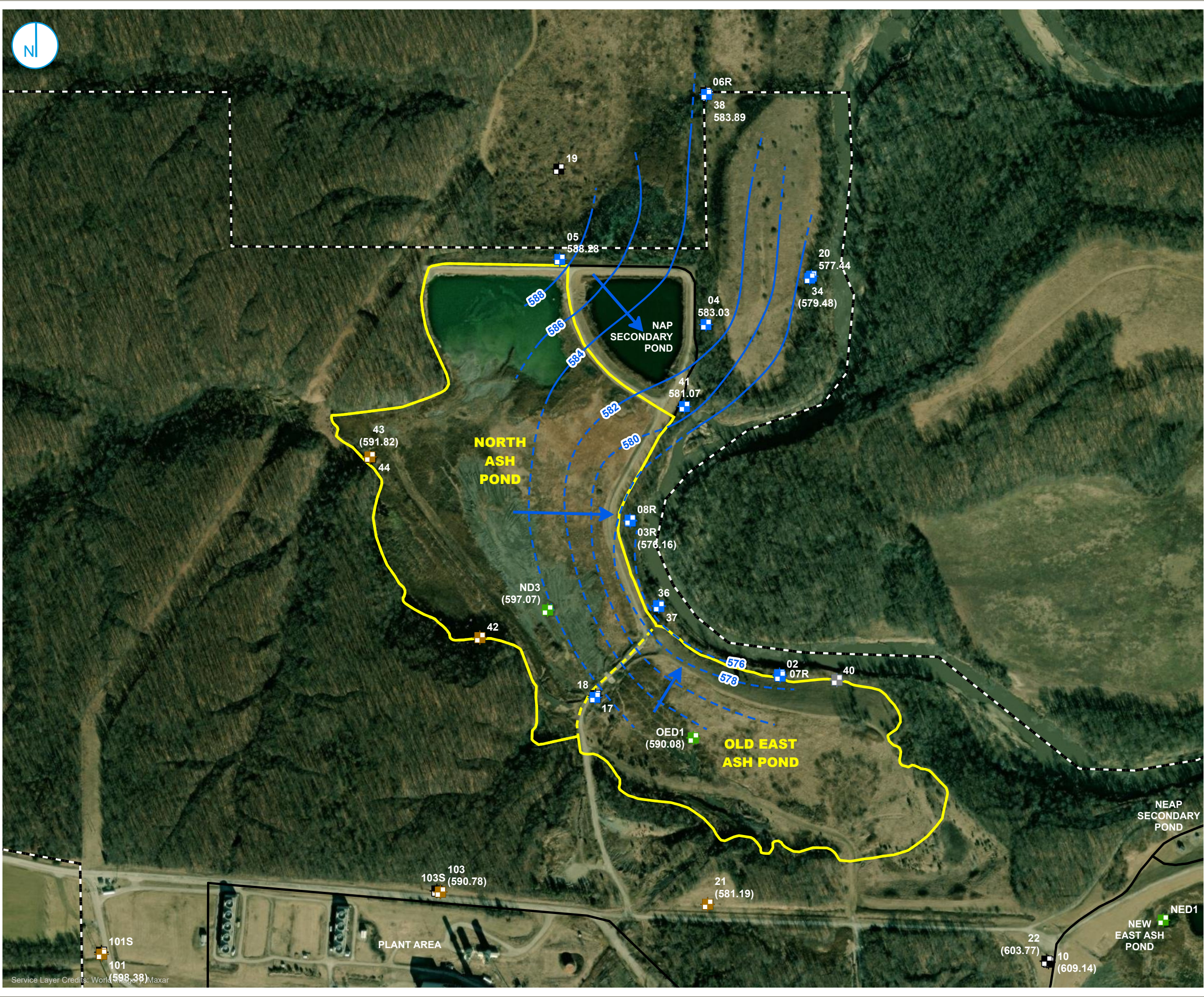
**2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
NORTH ASH POND AND OLD EAST ASH POND
VERMILION POWER PLANT
OAKWOOD, ILLINOIS**

FIGURE 10

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



PROJECT: 169000XXXX | DATED: 1/8/2025 | DESIGNER: PWYSIATKO
Y:\Mapping\Projects\22\2285\MXD\GW_Contours\Round_2024\VerMilion\NAPS_OEAP_910_911\NAPS_OEAP_2024.aprx | VER 910 911 NAPS OEAP Pot Surface 20240821



- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- MONITORING WELL
- CLOSED MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

NOTES:
1. ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
2. ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. COMPLIANCE MONITORING WELL 40 WAS ABANDONED DUE TO CONSTRUCTION ACTIVITY FOR THE GROUNDWATER EXTRACTION TRENCH.



**POTENTIOMETRIC SURFACE MAP
AUGUST 21, 2024**

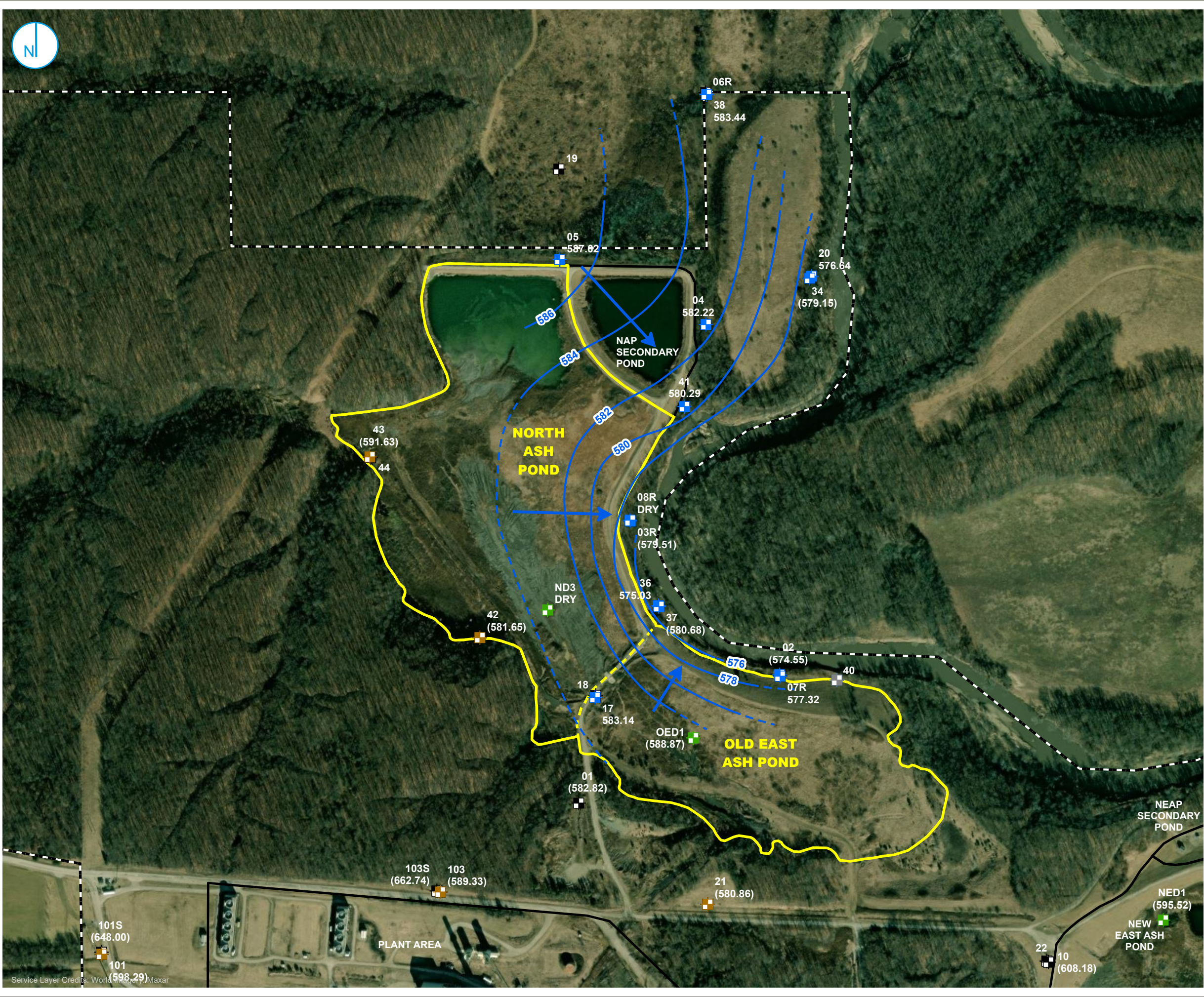
**2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
NORTH ASH POND AND OLD EAST ASH POND
VERMILION POWER PLANT
OAKWOOD, ILLINOIS**

FIGURE 11

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



PROJECT: 169000XXXX | DATED: 1/8/2025 | DESIGNER: PWYSIATKO
Y:\Mapping\Projects\22\2285\MXD\GW_Contours\Round_2024\Vermlion\NAPS_OEAP_910_911\NAPS_OEAP_2024.aprx | VER 910 911 NAPS OEAP Pot Surface 2024 10 21



POTENTIOMETRIC SURFACE MAP
OCTOBER 21, 2024

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
NORTH ASH POND AND OLD EAST ASH POND
VERMILION POWER PLANT
OAKWOOD, ILLINOIS

FIGURE 13

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- MONITORING WELL
- CLOSED MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

NOTES:
1. ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
2. ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. COMPLIANCE MONITORING WELL 40 WAS ABANDONED DUE TO CONSTRUCTION ACTIVITY FOR THE GROUNDWATER EXTRACTION TRENCH.

0 200 400
Feet

**POTENTIOMETRIC SURFACE MAP
NOVEMBER 12, 2024**

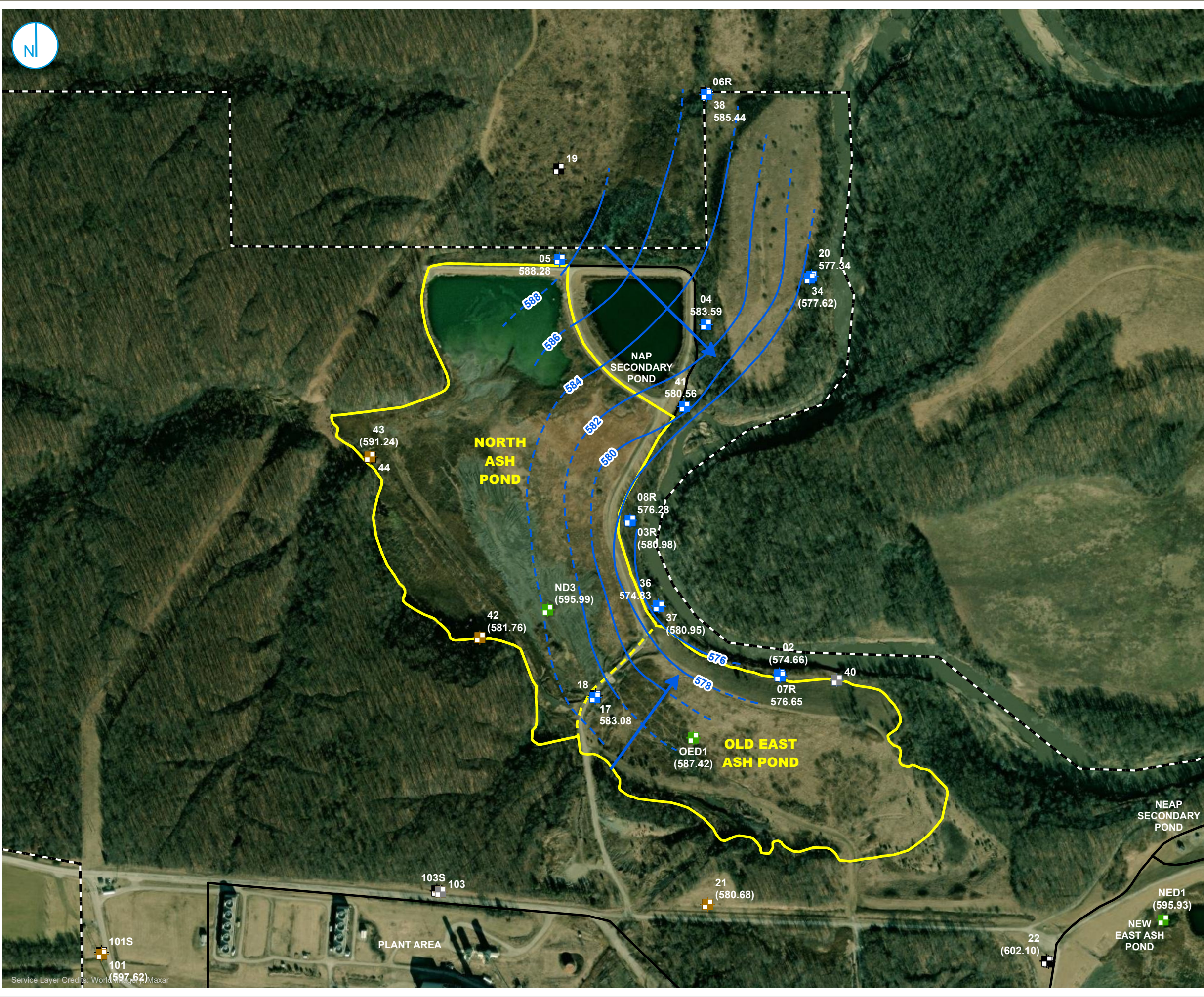
**2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
NORTH ASH POND AND OLD EAST ASH POND
VERMILION POWER PLANT
OAKWOOD, ILLINOIS**

FIGURE 14

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



PROJECT: 169000XXXXX | DATED: 1/13/2025 | DESIGNER: PWYSIATKO
Y:\Mapping\Projects\22\2285\MXD\GW_Contours\Round_2024\Vermlion\NAPS_OEAP_910_911\NAPS_OEAP_2024.aprx\VER 910 911 NAPS OEAP Pot Surface 2024.1206



- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- MONITORING WELL
- CLOSED MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

NOTES:
1. ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
2. ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. COMPLIANCE MONITORING WELL 40 WAS ABANDONED DUE TO CONSTRUCTION ACTIVITY FOR THE GROUNDWATER EXTRACTION TRENCH.

0 200 400
Feet

**POTENTIOMETRIC SURFACE MAP
DECEMBER 6, 2024**

**2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
NORTH ASH POND AND OLD EAST ASH POND
VERMILION POWER PLANT
OAKWOOD, ILLINOIS**

FIGURE 15

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



ATTACHMENTS

ATTACHMENT A
GROUNDWATER ELEVATION DATA

ATTACHMENT A
GROUNDWATER ELEVATION DATA
2024 35 I.A.C. § 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
02	Compliance	LGU	01/23/2024	18.18	575.86
02	Compliance	LGU	02/19/2024	18.65	575.39
02	Compliance	LGU	03/06/2024	18.58	575.45
02	Compliance	LGU	04/06/2024	17.64	576.39
02	Compliance	LGU	05/06/2024	17.62	576.42
02	Compliance	LGU	06/29/2024	DM³	
02	Compliance	LGU	07/29/2024	18.93	575.11
02	Compliance	LGU	08/21/2024	DM³	
02	Compliance	LGU	09/21/2024	DM³	
02	Compliance	LGU	10/21/2024	19.49	574.55
02	Compliance	LGU	11/12/2024	DM³	
02	Compliance	LGU	12/06/2024	19.30	574.66
03R	Compliance	LGU	01/23/2024	8.30	580.13
03R	Compliance	LGU	02/19/2024	7.79	580.64
03R	Compliance	LGU	03/06/2024	7.81	580.61
03R	Compliance	LGU	04/06/2024	6.54	581.88
03R	Compliance	LGU	05/06/2024	6.58	581.85
03R	Compliance	LGU	06/29/2024	DM⁷	
03R	Compliance	LGU	07/29/2024	7.95	580.48
03R	Compliance	LGU	08/21/2024	13.61	576.16
03R	Compliance	LGU	09/21/2024	DM⁷	
03R	Compliance	LGU	10/21/2024	8.92	579.51
03R	Compliance	LGU	11/12/2024	DM⁷	
03R	Compliance	LGU	12/06/2024	8.80	580.98
04	Compliance	UA	01/23/2024	6.50	584.56
04	Compliance	UA	02/19/2024	7.05	584.01
04	Compliance	UA	03/06/2024	6.88	584.17
04	Compliance	UA	04/06/2024	6.63	584.42
04	Compliance	UA	05/06/2024	7.02	584.04
04	Compliance	UA	06/29/2024	8.25	582.80
04	Compliance	UA	07/29/2024	8.18	582.88
04	Compliance	UA	08/21/2024	8.13	583.03
04	Compliance	UA	09/21/2024	8.62	582.55
04	Compliance	UA	10/21/2024	8.84	582.22
04	Compliance	UA	11/12/2024	7.54	583.62
04	Compliance	UA	12/06/2024	7.58	583.59
05	Compliance	UA	01/23/2024	6.53	589.29
05	Compliance	UA	02/19/2024	7.15	588.67
05	Compliance	UA	03/06/2024	6.98	588.83
05	Compliance	UA	04/06/2024	6.78	589.03
05	Compliance	UA	05/06/2024	7.11	588.71
05	Compliance	UA	06/29/2024	8.05	587.76
05	Compliance	UA	07/29/2024	7.59	588.23
05	Compliance	UA	08/21/2024	7.48	588.28
05	Compliance	UA	09/21/2024	8.50	587.27
05	Compliance	UA	10/21/2024	8.80	587.02

ATTACHMENT A
GROUNDWATER ELEVATION DATA
2024 35 I.A.C. § 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
05	Compliance	UA	11/12/2024	DM ⁷	
05	Compliance	UA	12/06/2024	7.50	588.28
07R	Compliance	UA	01/23/2024	16.20	578.47
07R	Compliance	UA	02/19/2024	16.10	578.57
07R	Compliance	UA	03/06/2024	15.99	578.67
07R	Compliance	UA	04/06/2024	15.84	578.82
07R	Compliance	UA	05/06/2024	15.61	579.06
07R	Compliance	UA	06/29/2024	DM ³	
07R	Compliance	UA	07/29/2024	17.05	577.62
07R	Compliance	UA	08/21/2024	DM ³	
07R	Compliance	UA	09/21/2024	DM ³	
07R	Compliance	UA	10/21/2024	17.35	577.32
07R	Compliance	UA	11/12/2024	DM ³	
07R	Compliance	UA	12/06/2024	17.89	576.65
08R	Compliance	UA	01/23/2024	13.37	576.66
08R	Compliance	UA	02/19/2024	13.29	576.74
08R	Compliance	UA	03/06/2024	13.44	576.58
08R	Compliance	UA	04/06/2024	13.13	576.89
08R	Compliance	UA	05/06/2024	12.24	577.79
08R	Compliance	UA	06/29/2024	DM ⁷	
08R	Compliance	UA	07/29/2024	13.89	576.14
08R	Compliance	UA	08/21/2024	DM ⁷	
08R	Compliance	UA	09/21/2024	DM ⁷	
08R	Compliance	UA	10/21/2024	Dry	
08R	Compliance	UA	11/12/2024	DM ⁷	
08R	Compliance	UA	12/06/2024	14.20	576.28
17	Compliance	UA	01/24/2024	26.50	596.86
17	Compliance	UA	02/19/2024	39.17	584.19
17	Compliance	UA	03/06/2024	38.86	584.49
17	Compliance	UA	04/06/2024	34.86	588.49
17	Compliance	UA	05/06/2024	37.63	585.73
17	Compliance	UA	06/29/2024	DM ³	
17	Compliance	UA	07/29/2024	39.18	584.18
17	Compliance	UA	08/21/2024	DM ³	
17	Compliance	UA	09/21/2024	DM ³	
17	Compliance	UA	10/21/2024	40.22	583.14
17	Compliance	UA	11/12/2024	DM ³	
17	Compliance	UA	12/06/2024	40.32	583.08
20	Compliance	UA	01/23/2024	13.80	578.64
20	Compliance	UA	02/19/2024	13.62	578.82
20	Compliance	UA	03/06/2024	13.95	578.48
20	Compliance	UA	04/06/2024	13.32	579.11
20	Compliance	UA	05/06/2024	12.87	579.57
20	Compliance	UA	06/29/2024	14.83	577.60
20	Compliance	UA	07/29/2024	15.13	577.31
20	Compliance	UA	08/21/2024	15.06	577.44

ATTACHMENT A
GROUNDWATER ELEVATION DATA
2024 35 I.A.C. § 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
20	Compliance	UA	09/21/2024	15.40	577.10
20	Compliance	UA	10/21/2024	15.80	576.64
20	Compliance	UA	11/12/2024	15.17	577.32
20	Compliance	UA	12/06/2024	15.17	577.34
21	Background	LGU	01/24/2024	92.04	580.84
21	Background	LGU	02/19/2024	91.82	581.06
21	Background	LGU	03/06/2024	91.85	581.02
21	Background	LGU	04/06/2024	91.92	580.95
21	Background	LGU	05/06/2024	91.11	581.77
21	Background	LGU	06/29/2024	91.05	581.82
21	Background	LGU	07/29/2024	91.16	581.72
21	Background	LGU	08/21/2024	91.76	581.19
21	Background	LGU	09/21/2024	91.59	581.36
21	Background	LGU	10/21/2024	92.02	580.86
21	Background	LGU	11/12/2024	91.71	581.25
21	Background	LGU	12/06/2024	92.28	580.68
34	Compliance	LGU	01/23/2024	13.99	578.63
34	Compliance	LGU	02/19/2024	14.05	578.57
34	Compliance	LGU	03/06/2024	14.31	578.30
34	Compliance	LGU	04/06/2024	13.65	578.96
34	Compliance	LGU	05/06/2024	12.86	579.76
34	Compliance	LGU	06/29/2024	14.58	578.03
34	Compliance	LGU	07/29/2024	DM ³	
34	Compliance	LGU	08/21/2024	13.10	579.48
34	Compliance	LGU	09/21/2024	13.32	579.27
34	Compliance	LGU	10/21/2024	13.47	579.15
34	Compliance	LGU	11/12/2024	14.87	577.72
34	Compliance	LGU	12/06/2024	14.98	577.62
36	Compliance	UA	01/23/2024	13.49	576.64
36	Compliance	UA	02/19/2024	14.19	575.94
36	Compliance	UA	03/06/2024	14.16	575.96
36	Compliance	UA	04/06/2024	13.86	576.26
36	Compliance	UA	05/06/2024	13.04	577.09
36	Compliance	UA	06/29/2024	DM ³	
36	Compliance	UA	07/29/2024	14.55	575.58
36	Compliance	UA	08/21/2024	DM ³	
36	Compliance	UA	09/21/2024	DM ³	
36	Compliance	UA	10/21/2024	15.10	575.03
36	Compliance	UA	11/12/2024	DM ³	
36	Compliance	UA	12/06/2024	15.39	574.83
37	Compliance	LGU	01/23/2024	8.40	581.48
37	Compliance	LGU	02/19/2024	7.90	581.98
37	Compliance	LGU	03/06/2024	8.18	581.69
37	Compliance	LGU	04/06/2024	6.67	583.20
37	Compliance	LGU	05/06/2024	6.93	582.95
37	Compliance	LGU	06/29/2024	DM ³	

ATTACHMENT A
GROUNDWATER ELEVATION DATA
2024 35 I.A.C. § 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
37	Compliance	LGU	07/29/2024	8.15	581.73
37	Compliance	LGU	08/21/2024	DM³	
37	Compliance	LGU	09/21/2024	DM³	
37	Compliance	LGU	10/21/2024	9.20	580.68
37	Compliance	LGU	11/12/2024	DM³	
37	Compliance	LGU	12/06/2024	8.90	580.95
38	Compliance	UA	01/23/2024	3.06	588.77
38	Compliance	UA	02/19/2024	3.35	588.48
38	Compliance	UA	03/06/2024	3.49	588.33
38	Compliance	UA	04/06/2024	3.34	588.48
38	Compliance	UA	05/06/2024	3.42	588.41
38	Compliance	UA	06/29/2024	7.64	584.18
38	Compliance	UA	07/29/2024	7.35	584.48
38	Compliance	UA	08/21/2024	7.85	583.89
38	Compliance	UA	09/21/2024	8.23	583.51
38	Compliance	UA	10/21/2024	8.39	583.44
38	Compliance	UA	11/12/2024	7.55	584.19
38	Compliance	UA	12/06/2024	6.31	585.44
40	Compliance	UA	01/23/2024	14.32	578.08
40	Compliance	UA	02/19/2024	14.61	577.79
40	Compliance	UA	03/06/2024	14.44	577.95
40	Compliance	UA	04/06/2024	14.08	578.31
40	Compliance	UA	05/06/2024	14.08	578.32
41	Compliance	UA	01/24/2024	6.04	581.30
41	Compliance	UA	02/19/2024	5.95	581.39
41	Compliance	UA	03/06/2024	5.90	581.43
41	Compliance	UA	04/06/2024	5.69	581.64
41	Compliance	UA	05/06/2024	4.86	582.48
41	Compliance	UA	06/29/2024	5.81	581.52
41	Compliance	UA	07/29/2024	6.11	581.23
41	Compliance	UA	08/21/2024	6.33	581.07
41	Compliance	UA	09/21/2024	6.40	581.00
41	Compliance	UA	10/21/2024	7.05	580.29
41	Compliance	UA	11/12/2024	6.69	580.70
41	Compliance	UA	12/06/2024	6.85	580.56
42	Background	LGU	01/24/2024	25.15	583.42
42	Background	LGU	02/19/2024	25.40	583.17
42	Background	LGU	03/06/2024	26.69	581.87
42	Background	LGU	04/06/2024	26.38	582.18
42	Background	LGU	05/06/2024	25.47	583.10
42	Background	LGU	06/29/2024	26.57	581.99
42	Background	LGU	07/29/2024	25.87	582.70
42	Background	LGU	08/21/2024	DM⁷	
42	Background	LGU	09/21/2024	DM⁷	
42	Background	LGU	10/21/2024	26.92	581.65
42	Background	LGU	11/12/2024	DM⁷	

ATTACHMENT A
GROUNDWATER ELEVATION DATA
2024 35 I.A.C. § 845 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
42	Background	LGU	12/06/2024	26.77	581.76
43	Background	LGU	01/24/2024	16.64	591.37
43	Background	LGU	02/19/2024	16.29	591.72
43	Background	LGU	03/06/2024	16.01	591.99
43	Background	LGU	04/06/2024	16.06	591.94
43	Background	LGU	05/06/2024	15.57	592.44
43	Background	LGU	06/29/2024	15.66	592.34
43	Background	LGU	07/29/2024	16.01	592.00
43	Background	LGU	08/21/2024	16.26	591.82
43	Background	LGU	09/21/2024	16.16	591.92
43	Background	LGU	10/21/2024	16.38	591.63
43	Background	LGU	11/12/2024	16.73	591.35
43	Background	LGU	12/06/2024	16.85	591.24
101	Background	LGU	01/24/2024	108.90	597.94
101	Background	LGU	02/19/2024	108.96	597.88
101	Background	LGU	03/06/2024	108.83	598.00
101	Background	LGU	04/06/2024	109.00	597.83
101	Background	LGU	05/06/2024	108.83	598.01
101	Background	LGU	06/29/2024	108.44	598.39
101	Background	LGU	07/29/2024	108.50	598.34
101	Background	LGU	08/21/2024	108.47	598.38
101	Background	LGU	09/21/2024	108.12	598.72
101	Background	LGU	10/21/2024	108.55	598.29
101	Background	LGU	11/12/2024	109.10	597.74
101	Background	LGU	12/06/2024	109.23	597.62
103	Background	LGU	01/24/2024	140.28	580.27
103	Background	LGU	02/19/2024	139.60	580.95
103	Background	LGU	03/06/2024	138.27	582.27
103	Background	LGU	04/06/2024	137.79	582.75
103	Background	LGU	05/09/2024	[123.28]	[597.27]
103	Background	LGU	06/29/2024	129.88	590.67
103	Background	LGU	07/30/2024	130.10	590.45
103	Background	LGU	08/21/2024	129.83	590.78
103	Background	LGU	09/21/2024	130.52	590.09
103	Background	LGU	10/21/2024	131.22	589.33
103R	Background	LGU	12/06/2024	136.93	NA
ND3	Water Level	CCR	01/24/2024	Dry	
ND3	Water Level	CCR	02/19/2024	16.65	598.07
ND3	Water Level	CCR	03/06/2024	16.48	598.23
ND3	Water Level	CCR	04/06/2024	16.07	598.64
ND3	Water Level	CCR	05/06/2024	13.55	601.17
ND3	Water Level	CCR	06/29/2024	17.17	597.54
ND3	Water Level	CCR	07/29/2024	17.20	597.52
ND3	Water Level	CCR	08/21/2024	17.49	597.07
ND3	Water Level	CCR	09/21/2024	18.63	595.93
ND3	Water Level	CCR	10/21/2024	Dry	

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VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
ND3	Water Level	CCR	11/12/2024	19.91	594.64
ND3	Water Level	CCR	12/06/2024	18.58	595.99
OED1	Water Level	CCR	01/24/2024	44.23	586.35
OED1	Water Level	CCR	02/19/2024	42.80	587.78
OED1	Water Level	CCR	03/06/2024	42.03	588.54
OED1	Water Level	CCR	04/06/2024	41.18	589.39
OED1	Water Level	CCR	05/06/2024	40.47	590.11
OED1	Water Level	CCR	06/29/2024	39.15	591.42
OED1	Water Level	CCR	07/29/2024	40.22	590.36
OED1	Water Level	CCR	08/21/2024	40.41	590.08
OED1	Water Level	CCR	09/21/2024	41.05	589.45
OED1	Water Level	CCR	10/21/2024	41.71	588.87
OED1	Water Level	CCR	11/12/2024	DM ⁷	
OED1	Water Level	CCR	12/06/2024	43.09	587.42
SG01	Water Level	SW	01/24/2024	DM ¹	
SG01	Water Level	SW	02/19/2024	15.19	677.39
SG01	Water Level	SW	03/06/2024	15.34	677.24
SG01	Water Level	SW	04/06/2024	16.05	676.53
SG01	Water Level	SW	05/06/2024	16.16	676.42
SG01	Water Level	SW	06/29/2024	17.00	675.58
SG01	Water Level	SW	07/29/2024	16.21	676.37
SG01	Water Level	SW	08/21/2024	16.55	676.02
SG01	Water Level	SW	09/21/2024	17.23	675.34
SG01	Water Level	SW	10/21/2024	17.48	675.10
SG01	Water Level	SW	11/12/2024	17.39	675.18
SG01	Water Level	SW	12/06/2024	17.66	674.92

Notes:
BMP = below measuring point
Bracketing [] indicates that the measurement was obtained outside of the episodic depth to groundwater measurements time frame.
Depth to Groundwater/Groundwater Elevation Code (if applicable):
DM¹ = Depth to water was not measured.
DM² = Depth to water was not measured because water was above or below the staff gage markings.
DM³ = Depth to water was not measured because the location was inaccessible.
DM⁴ = Depth to water was not measured because water level was below the top of the pump.
DM⁵ = Depth to water was not measured because water level was above the top of casing (artesian well).
DM⁶ = Depth to water was not measured because of damage to the well.
DM⁷ = Depth to water was not measured due to required pressure transducer maintenance.
DM⁸ = Lab provided groundwater elevation data and not depth to water.

NA = not available/not applicable
NAVD88 = North American Vertical Datum of 1988
Monitored Unit Abbreviations:
CCR = coal combustion residuals
LGU = lower groundwater unit
SW = surface water
UA = uppermost aquifer

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ATTACHMENT B
COMPARISON TO BACKGROUND

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 1, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
02	LGU	E004	Antimony, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.003	0.00100
02	LGU	E004	Arsenic, total	mg/L	03/31/21 - 02/20/24	12	8	CI around mean	0.00557	0.0600
02	LGU	E004	Barium, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.193	0.520
02	LGU	E004	Beryllium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.001	0.001
02	LGU	E004	Boron, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.306	2.45
02	LGU	E004	Cadmium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0005	0.001
02	LGU	E004	Chloride, total	mg/L	03/31/21 - 02/20/24	12	0	CB around linear reg	38.6	82.0
02	LGU	E004	Chromium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.005	0.0200
02	LGU	E004	Cobalt, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.001	0.00400
02	LGU	E004	Fluoride, total	mg/L	03/31/21 - 02/20/24	12	8	CB around linear reg	0.497	1.14
02	LGU	E004	Lead, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0005	0.00600
02	LGU	E004	Lithium, total	mg/L	03/31/21 - 02/20/24	12	50	CI around mean	0.0029	0.0300
02	LGU	E004	Mercury, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0002	0.0002
02	LGU	E004	Molybdenum, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.005	0.0200
02	LGU	E004	pH (field)	SU	03/31/21 - 02/20/24	12	0	CI around mean	7.4/7.8	6.8/7.8
02	LGU	E004	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 02/20/24	11	0	CI around mean	0.485	1.90
02	LGU	E004	Selenium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0025	0.001
02	LGU	E004	Sulfate, total	mg/L	03/31/21 - 02/20/24	12	0	CB around linear reg	-12.1	227
02	LGU	E004	Thallium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.002	0.002
02	LGU	E004	Total Dissolved Solids	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	558	746
03R	LGU	E004	Antimony, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.003	0.00100
03R	LGU	E004	Arsenic, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.00491	0.0600
03R	LGU	E004	Barium, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.287	0.520
03R	LGU	E004	Beryllium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.001
03R	LGU	E004	Boron, total	mg/L	03/30/21 - 02/20/24	12	0	CI around median	19.1	2.45
03R	LGU	E004	Cadmium, total	mg/L	03/30/21 - 02/20/24	12	75	CI around median	0.00051	0.001
03R	LGU	E004	Chloride, total	mg/L	03/30/21 - 02/20/24	12	2	CI around mean	26	82.0

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
03R	LGU	E004	Chromium, total	mg/L	03/30/21 - 02/20/24	12	83	CI around median	0.0015	0.0200
03R	LGU	E004	Cobalt, total	mg/L	03/30/21 - 02/20/24	12	83	CI around median	0.001	0.00400
03R	LGU	E004	Fluoride, total	mg/L	03/30/21 - 02/20/24	12	8	CI around mean	0.447	1.14
03R	LGU	E004	Lead, total	mg/L	03/30/21 - 02/20/24	12	58	CI around median	0.001	0.00600
03R	LGU	E004	Lithium, total	mg/L	03/30/21 - 02/20/24	12	92	CI around median	0.003	0.0300
03R	LGU	E004	Mercury, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0002	0.0002
03R	LGU	E004	Molybdenum, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.185	0.0200
03R	LGU	E004	pH (field)	SU	03/30/21 - 02/20/24	12	0	CI around mean	7.2/7.4	6.8/7.8
03R	LGU	E004	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 02/20/24	10	0	CI around mean	0.928	1.90
03R	LGU	E004	Selenium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0025	0.001
03R	LGU	E004	Sulfate, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	487	227
03R	LGU	E004	Thallium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.002	0.002
03R	LGU	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	1,090	746
04	UA	E004	Antimony, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.003	0.00100
04	UA	E004	Arsenic, total	mg/L	03/30/21 - 02/21/24	12	8	CI around geomean	0.00541	0.0600
04	UA	E004	Barium, total	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	0.225	0.520
04	UA	E004	Beryllium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.001	0.001
04	UA	E004	Boron, total	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	8.41	2.45
04	UA	E004	Cadmium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0005	0.001
04	UA	E004	Chloride, total	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	10.4	82.0
04	UA	E004	Chromium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.005	0.0200
04	UA	E004	Cobalt, total	mg/L	03/30/21 - 02/21/24	12	92	Most recent sample	0.001	0.00400
04	UA	E004	Fluoride, total	mg/L	03/30/21 - 02/21/24	12	8	CI around median	0.3	1.14
04	UA	E004	Lead, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0005	0.00600
04	UA	E004	Lithium, total	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	0.0461	0.0300
04	UA	E004	Mercury, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0002	0.0002
04	UA	E004	Molybdenum, total	mg/L	03/30/21 - 02/21/24	12	0	CB around linear reg	0.032	0.0200

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
04	UA	E004	pH (field)	SU	03/30/21 - 02/21/24	12	0	CI around mean	7.3/7.6	6.8/7.8
04	UA	E004	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 02/21/24	10	0	CI around mean	0.635	1.90
04	UA	E004	Selenium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0025	0.001
04	UA	E004	Sulfate, total	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	37.3	227
04	UA	E004	Thallium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.002	0.002
04	UA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	366	746
05	UA	E004	Antimony, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.003	0.00100
05	UA	E004	Arsenic, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.02	0.0600
05	UA	E004	Barium, total	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	0.022	0.520
05	UA	E004	Beryllium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.001	0.001
05	UA	E004	Boron, total	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	18.6	2.45
05	UA	E004	Cadmium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0005	0.001
05	UA	E004	Chloride, total	mg/L	03/30/21 - 02/21/24	12	2	CI around mean	7.55	82.0
05	UA	E004	Chromium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.005	0.0200
05	UA	E004	Cobalt, total	mg/L	03/30/21 - 02/21/24	12	83	CI around median	0.001	0.00400
05	UA	E004	Fluoride, total	mg/L	03/30/21 - 02/21/24	12	8	CB around linear reg	0.539	1.14
05	UA	E004	Lead, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0005	0.00600
05	UA	E004	Lithium, total	mg/L	03/30/21 - 02/21/24	12	0	CI around geomean	0.0852	0.0300
05	UA	E004	Mercury, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0002	0.0002
05	UA	E004	Molybdenum, total	mg/L	03/30/21 - 02/21/24	12	0	CB around linear reg	0.0384	0.0200
05	UA	E004	pH (field)	SU	03/30/21 - 02/21/24	12	0	CI around mean	7.2/7.4	6.8/7.8
05	UA	E004	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 02/21/24	10	0	CI around mean	0.00358	1.90
05	UA	E004	Selenium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0025	0.001
05	UA	E004	Sulfate, total	mg/L	03/30/21 - 02/21/24	12	0	CB around linear reg	62.1	227
05	UA	E004	Thallium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.002	0.002
05	UA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	528	746
07R	UA	E004	Antimony, total	mg/L	05/12/21 - 02/21/24	8	75	CI around median	0.001	0.00100

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
07R	UA	E004	Arsenic, total	mg/L	05/12/21 - 02/21/24	8	12	CI around geomean	0.000795	0.0600
07R	UA	E004	Barium, total	mg/L	05/12/21 - 02/21/24	8	0	CI around median	0.0176	0.520
07R	UA	E004	Beryllium, total	mg/L	05/12/21 - 02/21/24	8	75	CI around median	0.0005	0.001
07R	UA	E004	Boron, total	mg/L	05/12/21 - 02/21/24	8	0	CB around linear reg	28.3	2.45
07R	UA	E004	Cadmium, total	mg/L	05/12/21 - 02/21/24	8	75	CI around median	0.0005	0.001
07R	UA	E004	Chloride, total	mg/L	05/12/21 - 02/21/24	8	0	CI around mean	4.54	82.0
07R	UA	E004	Chromium, total	mg/L	05/12/21 - 02/21/24	8	75	CI around median	0.001	0.0200
07R	UA	E004	Cobalt, total	mg/L	05/12/21 - 02/21/24	8	75	CI around median	0.001	0.00400
07R	UA	E004	Fluoride, total	mg/L	05/12/21 - 02/21/24	8	12	CI around mean	0.0882	1.14
07R	UA	E004	Lead, total	mg/L	05/12/21 - 02/21/24	8	62	CI around median	0.0005	0.00600
07R	UA	E004	Lithium, total	mg/L	05/12/21 - 02/21/24	8	0	CI around mean	0.536	0.0300
07R	UA	E004	Mercury, total	mg/L	05/12/21 - 02/21/24	8	100	All ND - Last	0.0002	0.0002
07R	UA	E004	Molybdenum, total	mg/L	05/12/21 - 02/21/24	8	0	CI around mean	0.361	0.0200
07R	UA	E004	pH (field)	SU	05/12/21 - 02/21/24	8	0	CI around mean	7.3/7.7	6.8/7.8
07R	UA	E004	Radium 226 + Radium 228, total	pCi/L	05/12/21 - 02/21/24	8	0	CI around geomean	0.278	1.90
07R	UA	E004	Selenium, total	mg/L	05/12/21 - 02/21/24	8	25	CI around mean	0.00122	0.001
07R	UA	E004	Sulfate, total	mg/L	05/12/21 - 02/21/24	8	0	CI around mean	1,750	227
07R	UA	E004	Thallium, total	mg/L	05/12/21 - 02/21/24	8	100	All ND - Last	0.002	0.002
07R	UA	E004	Total Dissolved Solids	mg/L	05/12/21 - 02/21/24	8	0	CI around mean	2,870	746
08R	UA	E004	Antimony, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.003	0.00100
08R	UA	E004	Arsenic, total	mg/L	03/30/21 - 02/20/24	12	0	CB around linear reg	0.0239	0.0600
08R	UA	E004	Barium, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.055	0.520
08R	UA	E004	Beryllium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.001
08R	UA	E004	Boron, total	mg/L	03/30/21 - 02/20/24	12	0	CI around median	14.4	2.45
08R	UA	E004	Cadmium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0005	0.001
08R	UA	E004	Chloride, total	mg/L	03/30/21 - 02/20/24	12	0	CI around median	4	82.0
08R	UA	E004	Chromium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.005	0.0200

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NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
08R	UA	E004	Cobalt, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.00400
08R	UA	E004	Fluoride, total	mg/L	03/30/21 - 02/20/24	12	75	CI around median	0.1	1.14
08R	UA	E004	Lead, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0005	0.00600
08R	UA	E004	Lithium, total	mg/L	03/30/21 - 02/20/24	12	0	CI around median	0.13	0.0300
08R	UA	E004	Mercury, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0002	0.0002
08R	UA	E004	Molybdenum, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.174	0.0200
08R	UA	E004	pH (field)	SU	03/30/21 - 02/20/24	12	0	CI around mean	7.0/8.0	6.8/7.8
08R	UA	E004	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 02/20/24	10	0	CI around mean	0.394	1.90
08R	UA	E004	Selenium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0025	0.001
08R	UA	E004	Sulfate, total	mg/L	03/30/21 - 02/20/24	12	0	CB around linear reg	518	227
08R	UA	E004	Thallium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.002	0.002
08R	UA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	1,060	746
17	UA	E004	Antimony, total	mg/L	--	--	--	--	--	0.00100
17	UA	E004	Arsenic, total	mg/L	--	--	--	--	--	0.0600
17	UA	E004	Barium, total	mg/L	--	--	--	--	--	0.520
17	UA	E004	Beryllium, total	mg/L	--	--	--	--	--	0.001
17	UA	E004	Boron, total	mg/L	--	--	--	--	--	2.45
17	UA	E004	Cadmium, total	mg/L	--	--	--	--	--	0.001
17	UA	E004	Chloride, total	mg/L	--	--	--	--	--	82.0
17	UA	E004	Chromium, total	mg/L	--	--	--	--	--	0.0200
17	UA	E004	Cobalt, total	mg/L	--	--	--	--	--	0.00400
17	UA	E004	Fluoride, total	mg/L	--	--	--	--	--	1.14
17	UA	E004	Lead, total	mg/L	--	--	--	--	--	0.00600
17	UA	E004	Lithium, total	mg/L	--	--	--	--	--	0.0300
17	UA	E004	Mercury, total	mg/L	--	--	--	--	--	0.0002
17	UA	E004	Molybdenum, total	mg/L	--	--	--	--	--	0.0200
17	UA	E004	pH (field)	SU	--	--	--	--	--	6.8/7.8

ATTACHMENT B.
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NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
17	UA	E004	Radium 226 + Radium 228, total	pCi/L	--	--	--	--	--	1.90
17	UA	E004	Selenium, total	mg/L	--	--	--	--	--	0.001
17	UA	E004	Sulfate, total	mg/L	--	--	--	--	--	227
17	UA	E004	Thallium, total	mg/L	--	--	--	--	--	0.002
17	UA	E004	Total Dissolved Solids	mg/L	--	--	--	--	--	746
20	UA	E004	Antimony, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.003	0.00100
20	UA	E004	Arsenic, total	mg/L	03/30/21 - 02/20/24	12	67	CI around median	0.001	0.0600
20	UA	E004	Barium, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.0175	0.520
20	UA	E004	Beryllium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.001
20	UA	E004	Boron, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.639	2.45
20	UA	E004	Cadmium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0005	0.001
20	UA	E004	Chloride, total	mg/L	03/30/21 - 02/20/24	12	14	CI around median	4	82.0
20	UA	E004	Chromium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.005	0.0200
20	UA	E004	Cobalt, total	mg/L	03/30/21 - 02/20/24	12	83	CI around median	0.001	0.00400
20	UA	E004	Fluoride, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.1	1.14
20	UA	E004	Lead, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0005	0.00600
20	UA	E004	Lithium, total	mg/L	03/30/21 - 02/20/24	12	0	CI around geomean	0.0198	0.0300
20	UA	E004	Mercury, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0002	0.0002
20	UA	E004	Molybdenum, total	mg/L	03/30/21 - 02/20/24	12	92	CI around median	0.0015	0.0200
20	UA	E004	pH (field)	SU	03/30/21 - 02/20/24	12	0	CI around mean	6.9/7.1	6.8/7.8
20	UA	E004	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 02/20/24	10	0	CI around mean	0.385	1.90
20	UA	E004	Selenium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0025	0.001
20	UA	E004	Sulfate, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	73.2	227
20	UA	E004	Thallium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.002	0.002
20	UA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	402	746
34	LGU	E004	Antimony, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.003	0.00100
34	LGU	E004	Arsenic, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.0244	0.0600

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
34	LGU	E004	Barium, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	0.154	0.520
34	LGU	E004	Beryllium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.001
34	LGU	E004	Boron, total	mg/L	03/30/21 - 02/20/24	12	0	CI around geomean	0.471	2.45
34	LGU	E004	Cadmium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0005	0.001
34	LGU	E004	Chloride, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	33.1	82.0
34	LGU	E004	Chromium, total	mg/L	03/30/21 - 02/20/24	12	42	CI around mean	0.00189	0.0200
34	LGU	E004	Cobalt, total	mg/L	03/30/21 - 02/20/24	12	50	CI around median	0.001	0.00400
34	LGU	E004	Fluoride, total	mg/L	03/30/21 - 02/20/24	12	8	CI around median	0.62	1.14
34	LGU	E004	Lead, total	mg/L	03/30/21 - 02/20/24	12	8	CI around mean	0.00145	0.00600
34	LGU	E004	Lithium, total	mg/L	03/30/21 - 02/20/24	12	42	CI around mean	0.00323	0.0300
34	LGU	E004	Mercury, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0002	0.0002
34	LGU	E004	Molybdenum, total	mg/L	03/30/21 - 02/20/24	12	92	CI around median	0.0015	0.0200
34	LGU	E004	pH (field)	SU	03/30/21 - 02/20/24	12	0	CI around mean	7.0/7.2	6.8/7.8
34	LGU	E004	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 02/20/24	10	0	CI around mean	0.402	1.90
34	LGU	E004	Selenium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0025	0.001
34	LGU	E004	Sulfate, total	mg/L	03/30/21 - 02/20/24	12	88	CI around median	1	227
34	LGU	E004	Thallium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.002	0.002
34	LGU	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	474	746
36	UA	E004	Antimony, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.003	0.00100
36	UA	E004	Arsenic, total	mg/L	03/31/21 - 02/20/24	12	8	CB around linear reg	0.00329	0.0600
36	UA	E004	Barium, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.103	0.520
36	UA	E004	Beryllium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.001	0.001
36	UA	E004	Boron, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	11.7	2.45
36	UA	E004	Cadmium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0005	0.001
36	UA	E004	Chloride, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	18.1	82.0
36	UA	E004	Chromium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.005	0.0200
36	UA	E004	Cobalt, total	mg/L	03/31/21 - 02/20/24	12	92	CI around median	0.001	0.00400

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
36	UA	E004	Fluoride, total	mg/L	03/31/21 - 02/20/24	12	8	CI around median	0.25	1.14
36	UA	E004	Lead, total	mg/L	03/31/21 - 02/20/24	12	92	CI around median	0.0005	0.00600
36	UA	E004	Lithium, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.134	0.0300
36	UA	E004	Mercury, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0002	0.0002
36	UA	E004	Molybdenum, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.11	0.0200
36	UA	E004	pH (field)	SU	03/31/21 - 02/20/24	12	0	CI around mean	7.0/7.3	6.8/7.8
36	UA	E004	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 02/20/24	11	0	CI around mean	1.03	1.90
36	UA	E004	Selenium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0025	0.001
36	UA	E004	Sulfate, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	952	227
36	UA	E004	Thallium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.002	0.002
36	UA	E004	Total Dissolved Solids	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	1,650	746
37	LGU	E004	Antimony, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.003	0.00100
37	LGU	E004	Arsenic, total	mg/L	03/31/21 - 02/20/24	12	0	CI around median	0.0257	0.0600
37	LGU	E004	Barium, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.281	0.520
37	LGU	E004	Beryllium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.001	0.001
37	LGU	E004	Boron, total	mg/L	03/31/21 - 02/20/24	12	0	CB around linear reg	1.67	2.45
37	LGU	E004	Cadmium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0005	0.001
37	LGU	E004	Chloride, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	41.3	82.0
37	LGU	E004	Chromium, total	mg/L	03/31/21 - 02/20/24	12	92	CB around T-S line	0.0015	0.0200
37	LGU	E004	Cobalt, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.001	0.00400
37	LGU	E004	Fluoride, total	mg/L	03/31/21 - 02/20/24	12	8	CI around mean	0.562	1.14
37	LGU	E004	Lead, total	mg/L	03/31/21 - 02/20/24	12	75	CI around median	0.0005	0.00600
37	LGU	E004	Lithium, total	mg/L	03/31/21 - 02/20/24	12	92	CI around median	0.003	0.0300
37	LGU	E004	Mercury, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0002	0.0002
37	LGU	E004	Molybdenum, total	mg/L	03/31/21 - 02/20/24	12	92	CI around median	0.0015	0.0200
37	LGU	E004	pH (field)	SU	03/31/21 - 02/20/24	12	0	CI around mean	6.8/7.1	6.8/7.8
37	LGU	E004	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 02/20/24	11	0	CI around mean	0.869	1.90

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
37	LGU	E004	Selenium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0025	0.001
37	LGU	E004	Sulfate, total	mg/L	03/31/21 - 02/20/24	12	0	CB around linear reg	97	227
37	LGU	E004	Thallium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.002	0.002
37	LGU	E004	Total Dissolved Solids	mg/L	03/31/21 - 02/20/24	12	0	CB around linear reg	804	746
38	UA	E004	Antimony, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.003	0.00100
38	UA	E004	Arsenic, total	mg/L	03/30/21 - 02/20/24	12	0	CB around linear reg	0.0261	0.0600
38	UA	E004	Barium, total	mg/L	03/30/21 - 02/20/24	12	0	CB around T-S line	-0.129	0.520
38	UA	E004	Beryllium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.001
38	UA	E004	Boron, total	mg/L	03/30/21 - 02/20/24	12	0	CI around geomean	0.414	2.45
38	UA	E004	Cadmium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0005	0.001
38	UA	E004	Chloride, total	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	17.5	82.0
38	UA	E004	Chromium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.005	0.0200
38	UA	E004	Cobalt, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.001	0.00400
38	UA	E004	Fluoride, total	mg/L	03/30/21 - 02/20/24	12	8	CI around geomean	0.347	1.14
38	UA	E004	Lead, total	mg/L	03/30/21 - 02/20/24	12	92	CI around median	0.0005	0.00600
38	UA	E004	Lithium, total	mg/L	03/30/21 - 02/20/24	12	50	CI around geomean	0.00293	0.0300
38	UA	E004	Mercury, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0002	0.0002
38	UA	E004	Molybdenum, total	mg/L	03/30/21 - 02/20/24	12	33	CI around mean	0.00237	0.0200
38	UA	E004	pH (field)	SU	03/30/21 - 02/20/24	12	0	CI around mean	6.9/7.1	6.8/7.8
38	UA	E004	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 02/20/24	10	0	CI around mean	0.935	1.90
38	UA	E004	Selenium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.0025	0.001
38	UA	E004	Sulfate, total	mg/L	03/30/21 - 02/20/24	12	92	CB around T-S line	0.0678	227
38	UA	E004	Thallium, total	mg/L	03/30/21 - 02/20/24	12	100	All ND - Last	0.002	0.002
38	UA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/20/24	12	0	CI around mean	500	746
40	UA	E004	Antimony, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.003	0.00100
40	UA	E004	Arsenic, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.0173	0.0600
40	UA	E004	Barium, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.0297	0.520

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
40	UA	E004	Beryllium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.001	0.001
40	UA	E004	Boron, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	19.8	2.45
40	UA	E004	Cadmium, total	mg/L	03/31/21 - 02/20/24	12	92	CI around median	0.0005	0.001
40	UA	E004	Chloride, total	mg/L	03/31/21 - 02/20/24	12	0	CB around linear reg	6.17	82.0
40	UA	E004	Chromium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.005	0.0200
40	UA	E004	Cobalt, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.0053	0.00400
40	UA	E004	Fluoride, total	mg/L	03/31/21 - 02/20/24	12	83	CI around median	0.1	1.14
40	UA	E004	Lead, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0005	0.00600
40	UA	E004	Lithium, total	mg/L	03/31/21 - 02/20/24	12	0	CI around median	0.74	0.0300
40	UA	E004	Mercury, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0002	0.0002
40	UA	E004	Molybdenum, total	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	0.0582	0.0200
40	UA	E004	pH (field)	SU	03/31/21 - 02/20/24	11	0	CI around mean	6.4/6.6	6.8/7.8
40	UA	E004	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 02/20/24	11	0	CI around mean	0.708	1.90
40	UA	E004	Selenium, total	mg/L	03/31/21 - 02/20/24	12	100	All ND - Last	0.0025	0.001
40	UA	E004	Sulfate, total	mg/L	03/31/21 - 02/20/24	12	0	CB around linear reg	2,960	227
40	UA	E004	Thallium, total	mg/L	03/31/21 - 02/20/24	12	83	CI around median	0.002	0.002
40	UA	E004	Total Dissolved Solids	mg/L	03/31/21 - 02/20/24	12	0	CI around mean	4,400	746
41	UA	E004	Antimony, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.003	0.00100
41	UA	E004	Arsenic, total	mg/L	03/30/21 - 02/21/24	12	0	CB around linear reg	0.0103	0.0600
41	UA	E004	Barium, total	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	0.231	0.520
41	UA	E004	Beryllium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.001	0.001
41	UA	E004	Boron, total	mg/L	03/30/21 - 02/21/24	12	0	CB around linear reg	2.93	2.45
41	UA	E004	Cadmium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0005	0.001
41	UA	E004	Chloride, total	mg/L	03/30/21 - 02/21/24	12	0	CB around linear reg	46.4	82.0
41	UA	E004	Chromium, total	mg/L	03/30/21 - 02/21/24	12	92	CI around median	0.0015	0.0200
41	UA	E004	Cobalt, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.001	0.00400
41	UA	E004	Fluoride, total	mg/L	03/30/21 - 02/21/24	12	8	CI around median	0.41	1.14

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
41	UA	E004	Lead, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0005	0.00600
41	UA	E004	Lithium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.005	0.0300
41	UA	E004	Mercury, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0002	0.0002
41	UA	E004	Molybdenum, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.005	0.0200
41	UA	E004	pH (field)	SU	03/30/21 - 02/21/24	12	0	CI around mean	7.0/7.2	6.8/7.8
41	UA	E004	Radium 226 + Radium 228, total	pCi/L	04/20/21 - 02/21/24	10	0	CI around mean	1.07	1.90
41	UA	E004	Selenium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.0025	0.001
41	UA	E004	Sulfate, total	mg/L	03/30/21 - 02/21/24	12	83	CI around median	1	227
41	UA	E004	Thallium, total	mg/L	03/30/21 - 02/21/24	12	100	All ND - Last	0.002	0.002
41	UA	E004	Total Dissolved Solids	mg/L	03/30/21 - 02/21/24	12	0	CI around mean	600	746

Notes:
- = no data available
Lower Confidence Limit (LCL) or Upper Confidence Limit (UCL) exceeded the statistical background value
HSU = hydrostratigraphic unit:
LGU = Lower Groundwater Unit
UA = Uppermost Aquifer
mg/L = milligrams per liter
ND = non-detect
pCi/L = picocuries per liter
SU = standard units
Sample Count = number of samples from Sampled Date Range used to calculate the Statistical Result
Statistical Calculation = method used to calculate the statistical result:
All ND - Last = All results were below the reporting limit, and the last determined reporting limit is shown
CB around T-S line = Confidence band around Thiel-Sen line
CB around linear reg = Confidence band around linear regression
CI around geomean = Confidence interval around the geometric mean
CI around mean = Confidence interval around the mean
CI around median = Confidence interval around the median
Most recent sample = Result for the most recently collected sample used due to insufficient data

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

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VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
02	LGU	E005	Antimony, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.003	0.00100
02	LGU	E005	Arsenic, total	mg/L	03/31/21 - 05/08/24	13	8	CI around mean	0.00573	0.0600
02	LGU	E005	Barium, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	0.196	0.520
02	LGU	E005	Beryllium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.001	0.001
02	LGU	E005	Boron, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	0.309	2.45
02	LGU	E005	Cadmium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0005	0.001
02	LGU	E005	Chloride, total	mg/L	03/31/21 - 05/08/24	13	0	CI around median	35	82.0
02	LGU	E005	Chromium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.005	0.0200
02	LGU	E005	Cobalt, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.001	0.00400
02	LGU	E005	Fluoride, total	mg/L	03/31/21 - 05/08/24	13	8	CB around linear reg	0.52	1.14
02	LGU	E005	Lead, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0005	0.00600
02	LGU	E005	Lithium, total	mg/L	03/31/21 - 05/08/24	13	54	CI around median	0.0034	0.0300
02	LGU	E005	Mercury, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0002	0.0002
02	LGU	E005	Molybdenum, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.005	0.0200
02	LGU	E005	pH (field)	SU	03/31/21 - 05/08/24	13	0	CI around mean	7.4/7.8	6.8/7.8
02	LGU	E005	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 05/08/24	12	0	CI around mean	0.5	1.90
02	LGU	E005	Selenium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0025	0.001
02	LGU	E005	Sulfate, total	mg/L	03/31/21 - 05/08/24	13	0	CB around linear reg	-13.2	227
02	LGU	E005	Thallium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.002	0.002
02	LGU	E005	Total Dissolved Solids	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	562	746
03R	LGU	E005	Antimony, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.003	0.00100
03R	LGU	E005	Arsenic, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	0.00485	0.0600
03R	LGU	E005	Barium, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	0.289	0.520
03R	LGU	E005	Beryllium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.001	0.001
03R	LGU	E005	Boron, total	mg/L	03/30/21 - 06/06/24	13	0	CB around linear reg	26	2.45
03R	LGU	E005	Cadmium, total	mg/L	03/30/21 - 06/06/24	13	77	CI around median	0.00051	0.001
03R	LGU	E005	Chloride, total	mg/L	03/30/21 - 06/06/24	13	2	CI around mean	26	82.0

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
03R	LGU	E005	Chromium, total	mg/L	03/30/21 - 06/06/24	13	85	CI around median	0.0015	0.0200
03R	LGU	E005	Cobalt, total	mg/L	03/30/21 - 06/06/24	13	85	CI around median	0.001	0.00400
03R	LGU	E005	Fluoride, total	mg/L	03/30/21 - 06/06/24	13	8	CI around mean	0.445	1.14
03R	LGU	E005	Lead, total	mg/L	03/30/21 - 06/06/24	13	62	CI around median	0.001	0.00600
03R	LGU	E005	Lithium, total	mg/L	03/30/21 - 06/06/24	13	92	CB around T-S line	0.003	0.0300
03R	LGU	E005	Mercury, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0002	0.0002
03R	LGU	E005	Molybdenum, total	mg/L	03/30/21 - 06/06/24	13	0	CB around linear reg	0.313	0.0200
03R	LGU	E005	pH (field)	SU	03/30/21 - 06/06/24	13	0	CI around mean	7.2/7.4	6.8/7.8
03R	LGU	E005	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 06/06/24	11	0	CI around mean	0.999	1.90
03R	LGU	E005	Selenium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0025	0.001
03R	LGU	E005	Sulfate, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	486	227
03R	LGU	E005	Thallium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.002	0.002
03R	LGU	E005	Total Dissolved Solids	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	1,090	746
04	UA	E005	Antimony, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.003	0.00100
04	UA	E005	Arsenic, total	mg/L	03/30/21 - 05/08/24	13	8	CI around geomean	0.00547	0.0600
04	UA	E005	Barium, total	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	0.221	0.520
04	UA	E005	Beryllium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.001	0.001
04	UA	E005	Boron, total	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	8.35	2.45
04	UA	E005	Cadmium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0005	0.001
04	UA	E005	Chloride, total	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	10.3	82.0
04	UA	E005	Chromium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.005	0.0200
04	UA	E005	Cobalt, total	mg/L	03/30/21 - 05/08/24	13	92	Most recent sample	0.001	0.00400
04	UA	E005	Fluoride, total	mg/L	03/30/21 - 05/08/24	13	8	CI around median	0.3	1.14
04	UA	E005	Lead, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0005	0.00600
04	UA	E005	Lithium, total	mg/L	03/30/21 - 05/08/24	13	0	CB around linear reg	0.0389	0.0300
04	UA	E005	Mercury, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0002	0.0002
04	UA	E005	Molybdenum, total	mg/L	03/30/21 - 05/08/24	13	0	CB around linear reg	0.033	0.0200

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
04	UA	E005	pH (field)	SU	03/30/21 - 05/08/24	13	0	CI around mean	7.4/7.6	6.8/7.8
04	UA	E005	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 05/08/24	11	0	CI around mean	0.7	1.90
04	UA	E005	Selenium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0025	0.001
04	UA	E005	Sulfate, total	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	35.5	227
04	UA	E005	Thallium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.002	0.002
04	UA	E005	Total Dissolved Solids	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	363	746
05	UA	E005	Antimony, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.003	0.00100
05	UA	E005	Arsenic, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.001	0.0600
05	UA	E005	Barium, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	0.0222	0.520
05	UA	E005	Beryllium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.001	0.001
05	UA	E005	Boron, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	18.4	2.45
05	UA	E005	Cadmium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0005	0.001
05	UA	E005	Chloride, total	mg/L	03/30/21 - 06/06/24	13	2	CI around mean	7.59	82.0
05	UA	E005	Chromium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.005	0.0200
05	UA	E005	Cobalt, total	mg/L	03/30/21 - 06/06/24	13	85	CI around median	0.001	0.00400
05	UA	E005	Fluoride, total	mg/L	03/30/21 - 06/06/24	13	8	CB around linear reg	0.549	1.14
05	UA	E005	Lead, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0005	0.00600
05	UA	E005	Lithium, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	0.0858	0.0300
05	UA	E005	Mercury, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0002	0.0002
05	UA	E005	Molybdenum, total	mg/L	03/30/21 - 06/06/24	13	0	CB around linear reg	0.0402	0.0200
05	UA	E005	pH (field)	SU	03/30/21 - 06/06/24	13	0	CB around linear reg	7.4/7.8	6.8/7.8
05	UA	E005	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 06/06/24	11	0	CI around geomean	0.0916	1.90
05	UA	E005	Selenium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0025	0.001
05	UA	E005	Sulfate, total	mg/L	03/30/21 - 06/06/24	13	0	CI around median	224	227
05	UA	E005	Thallium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.002	0.002
05	UA	E005	Total Dissolved Solids	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	531	746
07R	UA	E005	Antimony, total	mg/L	05/12/21 - 05/07/24	9	78	CI around median	0.001	0.00100

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
07R	UA	E005	Arsenic, total	mg/L	05/12/21 - 05/07/24	9	11	CI around median	0.0011	0.0600
07R	UA	E005	Barium, total	mg/L	05/12/21 - 05/07/24	9	0	CI around median	0.0176	0.520
07R	UA	E005	Beryllium, total	mg/L	05/12/21 - 05/07/24	9	78	CI around median	0.001	0.001
07R	UA	E005	Boron, total	mg/L	05/12/21 - 05/07/24	9	0	CI around mean	34.8	2.45
07R	UA	E005	Cadmium, total	mg/L	05/12/21 - 05/07/24	9	78	CI around median	0.0005	0.001
07R	UA	E005	Chloride, total	mg/L	05/12/21 - 05/07/24	9	0	CI around mean	4.38	82.0
07R	UA	E005	Chromium, total	mg/L	05/12/21 - 05/07/24	9	78	CI around median	0.0015	0.0200
07R	UA	E005	Cobalt, total	mg/L	05/12/21 - 05/07/24	9	78	CI around median	0.001	0.00400
07R	UA	E005	Fluoride, total	mg/L	05/12/21 - 05/07/24	9	11	CI around mean	0.0916	1.14
07R	UA	E005	Lead, total	mg/L	05/12/21 - 05/07/24	9	67	CI around median	0.0005	0.00600
07R	UA	E005	Lithium, total	mg/L	05/12/21 - 05/07/24	9	0	CI around mean	0.54	0.0300
07R	UA	E005	Mercury, total	mg/L	05/12/21 - 05/07/24	9	100	All ND - Last	0.0002	0.0002
07R	UA	E005	Molybdenum, total	mg/L	05/12/21 - 05/07/24	9	0	CI around mean	0.373	0.0200
07R	UA	E005	pH (field)	SU	05/12/21 - 05/07/24	9	0	CI around mean	7.3/7.7	6.8/7.8
07R	UA	E005	Radium 226 + Radium 228, total	pCi/L	05/12/21 - 05/07/24	9	0	CI around geomean	0.206	1.90
07R	UA	E005	Selenium, total	mg/L	05/12/21 - 05/07/24	9	22	CI around mean	0.0015	0.001
07R	UA	E005	Sulfate, total	mg/L	05/12/21 - 05/07/24	9	0	CI around mean	1,770	227
07R	UA	E005	Thallium, total	mg/L	05/12/21 - 05/07/24	9	100	All ND - Last	0.002	0.002
07R	UA	E005	Total Dissolved Solids	mg/L	05/12/21 - 05/07/24	9	0	CI around mean	2,870	746
08R	UA	E005	Antimony, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.003	0.00100
08R	UA	E005	Arsenic, total	mg/L	03/30/21 - 06/06/24	13	0	CB around linear reg	0.0265	0.0600
08R	UA	E005	Barium, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	0.0563	0.520
08R	UA	E005	Beryllium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.001	0.001
08R	UA	E005	Boron, total	mg/L	03/30/21 - 06/06/24	13	0	CI around median	29.8	2.45
08R	UA	E005	Cadmium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0005	0.001
08R	UA	E005	Chloride, total	mg/L	03/30/21 - 06/06/24	13	0	CI around median	5.7	82.0
08R	UA	E005	Chromium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.005	0.0200

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
08R	UA	E005	Cobalt, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.001	0.00400
08R	UA	E005	Fluoride, total	mg/L	03/30/21 - 06/06/24	13	77	CI around median	0.1	1.14
08R	UA	E005	Lead, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0005	0.00600
08R	UA	E005	Lithium, total	mg/L	03/30/21 - 06/06/24	13	0	CI around median	0.288	0.0300
08R	UA	E005	Mercury, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0002	0.0002
08R	UA	E005	Molybdenum, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	0.187	0.0200
08R	UA	E005	pH (field)	SU	03/30/21 - 06/06/24	13	0	CI around mean	7.1/7.9	6.8/7.8
08R	UA	E005	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 06/06/24	11	0	CI around mean	0.389	1.90
08R	UA	E005	Selenium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0025	0.001
08R	UA	E005	Sulfate, total	mg/L	03/30/21 - 06/06/24	13	0	CB around linear reg	550	227
08R	UA	E005	Thallium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.002	0.002
08R	UA	E005	Total Dissolved Solids	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	1,080	746
17	UA	E005	Antimony, total	mg/L	03/31/21 - 05/07/24	9	100	All ND - Last	0.003	0.00100
17	UA	E005	Arsenic, total	mg/L	03/31/21 - 05/07/24	9	22	CI around mean	0.00284	0.0600
17	UA	E005	Barium, total	mg/L	03/31/21 - 05/07/24	9	0	CI around mean	0.025	0.520
17	UA	E005	Beryllium, total	mg/L	03/31/21 - 05/07/24	9	100	All ND - Last	0.001	0.001
17	UA	E005	Boron, total	mg/L	03/31/21 - 05/07/24	9	0	CI around mean	3.03	2.45
17	UA	E005	Cadmium, total	mg/L	03/31/21 - 05/07/24	9	100	All ND - Last	0.0005	0.001
17	UA	E005	Chloride, total	mg/L	03/31/21 - 05/09/24	9	0	CI around mean	15.3	82.0
17	UA	E005	Chromium, total	mg/L	03/31/21 - 05/07/24	9	100	All ND - Last	0.005	0.0200
17	UA	E005	Cobalt, total	mg/L	03/31/21 - 05/07/24	9	22	CI around mean	0.00133	0.00400
17	UA	E005	Fluoride, total	mg/L	03/31/21 - 05/09/24	9	11	CI around geomean	0.143	1.14
17	UA	E005	Lead, total	mg/L	03/31/21 - 05/07/24	9	67	CI around median	0.0005	0.00600
17	UA	E005	Lithium, total	mg/L	03/31/21 - 05/07/24	9	0	CI around mean	0.0191	0.0300
17	UA	E005	Mercury, total	mg/L	03/31/21 - 05/07/24	9	100	All ND - Last	0.0002	0.0002
17	UA	E005	Molybdenum, total	mg/L	03/31/21 - 05/07/24	9	44	CI around mean	0.00172	0.0200
17	UA	E005	pH (field)	SU	03/31/21 - 05/07/24	9	0	CI around mean	6.7/7.0	6.8/7.8

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
17	UA	E005	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 05/09/24	8	0	CI around mean	0.158	1.90
17	UA	E005	Selenium, total	mg/L	03/31/21 - 05/07/24	9	89	CI around median	0.001	0.001
17	UA	E005	Sulfate, total	mg/L	03/31/21 - 05/09/24	9	0	CI around geomean	911	227
17	UA	E005	Thallium, total	mg/L	03/31/21 - 05/07/24	9	100	All ND - Last	0.002	0.002
17	UA	E005	Total Dissolved Solids	mg/L	03/31/21 - 05/09/24	9	0	CI around mean	1,620	746
20	UA	E005	Antimony, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.003	0.00100
20	UA	E005	Arsenic, total	mg/L	03/30/21 - 06/06/24	13	69	CI around median	0.001	0.0600
20	UA	E005	Barium, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	0.0178	0.520
20	UA	E005	Beryllium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.001	0.001
20	UA	E005	Boron, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	0.689	2.45
20	UA	E005	Cadmium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0005	0.001
20	UA	E005	Chloride, total	mg/L	03/30/21 - 06/06/24	13	14	CI around median	4	82.0
20	UA	E005	Chromium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.005	0.0200
20	UA	E005	Cobalt, total	mg/L	03/30/21 - 06/06/24	13	85	CI around median	0.001	0.00400
20	UA	E005	Fluoride, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.1	1.14
20	UA	E005	Lead, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0005	0.00600
20	UA	E005	Lithium, total	mg/L	03/30/21 - 06/06/24	13	0	CI around geomean	0.0201	0.0300
20	UA	E005	Mercury, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0002	0.0002
20	UA	E005	Molybdenum, total	mg/L	03/30/21 - 06/06/24	13	92	CI around median	0.0015	0.0200
20	UA	E005	pH (field)	SU	03/30/21 - 06/06/24	13	0	CI around median	6.9/7.1	6.8/7.8
20	UA	E005	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 06/06/24	11	0	CI around mean	0.404	1.90
20	UA	E005	Selenium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.0025	0.001
20	UA	E005	Sulfate, total	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	74.4	227
20	UA	E005	Thallium, total	mg/L	03/30/21 - 06/06/24	13	100	All ND - Last	0.002	0.002
20	UA	E005	Total Dissolved Solids	mg/L	03/30/21 - 06/06/24	13	0	CI around mean	409	746
34	LGU	E005	Antimony, total	mg/L	03/30/21 - 05/07/24	13	100	All ND - Last	0.003	0.00100
34	LGU	E005	Arsenic, total	mg/L	03/30/21 - 05/07/24	13	0	CI around mean	0.0243	0.0600

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 2, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
34	LGU	E005	Barium, total	mg/L	03/30/21 - 05/07/24	13	0	CI around mean	0.154	0.520
34	LGU	E005	Beryllium, total	mg/L	03/30/21 - 05/07/24	13	100	All ND - Last	0.001	0.001
34	LGU	E005	Boron, total	mg/L	03/30/21 - 05/07/24	13	0	CI around mean	0.475	2.45
34	LGU	E005	Cadmium, total	mg/L	03/30/21 - 05/07/24	13	100	All ND - Last	0.0005	0.001
34	LGU	E005	Chloride, total	mg/L	03/30/21 - 05/07/24	13	0	CI around mean	32.9	82.0
34	LGU	E005	Chromium, total	mg/L	03/30/21 - 05/07/24	13	46	CI around mean	0.00194	0.0200
34	LGU	E005	Cobalt, total	mg/L	03/30/21 - 05/07/24	13	54	CI around median	0.001	0.00400
34	LGU	E005	Fluoride, total	mg/L	03/30/21 - 05/07/24	13	8	CI around median	0.63	1.14
34	LGU	E005	Lead, total	mg/L	03/30/21 - 05/07/24	13	15	CI around mean	0.00115	0.00600
34	LGU	E005	Lithium, total	mg/L	03/30/21 - 05/07/24	13	46	CI around mean	0.00325	0.0300
34	LGU	E005	Mercury, total	mg/L	03/30/21 - 05/07/24	13	100	All ND - Last	0.0002	0.0002
34	LGU	E005	Molybdenum, total	mg/L	03/30/21 - 05/07/24	13	92	CI around median	0.0015	0.0200
34	LGU	E005	pH (field)	SU	03/30/21 - 05/07/24	13	0	CI around mean	7.0/7.2	6.8/7.8
34	LGU	E005	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 05/07/24	11	0	CI around mean	0.469	1.90
34	LGU	E005	Selenium, total	mg/L	03/30/21 - 05/07/24	13	100	All ND - Last	0.0025	0.001
34	LGU	E005	Sulfate, total	mg/L	03/30/21 - 05/07/24	13	88	CB around T-S line	-1.09	227
34	LGU	E005	Thallium, total	mg/L	03/30/21 - 05/07/24	13	100	All ND - Last	0.002	0.002
34	LGU	E005	Total Dissolved Solids	mg/L	03/30/21 - 05/07/24	13	0	CI around mean	478	746
36	UA	E005	Antimony, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.003	0.00100
36	UA	E005	Arsenic, total	mg/L	03/31/21 - 05/08/24	13	8	CB around linear reg	0.00276	0.0600
36	UA	E005	Barium, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	0.0964	0.520
36	UA	E005	Beryllium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.001	0.001
36	UA	E005	Boron, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	11.9	2.45
36	UA	E005	Cadmium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0005	0.001
36	UA	E005	Chloride, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	17	82.0
36	UA	E005	Chromium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.005	0.0200
36	UA	E005	Cobalt, total	mg/L	03/31/21 - 05/08/24	13	92	CI around median	0.001	0.00400

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 2, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
36	UA	E005	Fluoride, total	mg/L	03/31/21 - 05/08/24	13	8	CI around median	0.25	1.14
36	UA	E005	Lead, total	mg/L	03/31/21 - 05/08/24	13	92	CI around median	0.0005	0.00600
36	UA	E005	Lithium, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	0.143	0.0300
36	UA	E005	Mercury, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0002	0.0002
36	UA	E005	Molybdenum, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	0.116	0.0200
36	UA	E005	pH (field)	SU	03/31/21 - 05/08/24	13	0	CI around mean	7.0/7.3	6.8/7.8
36	UA	E005	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 05/08/24	12	0	CI around mean	1.02	1.90
36	UA	E005	Selenium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0025	0.001
36	UA	E005	Sulfate, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	961	227
36	UA	E005	Thallium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.002	0.002
36	UA	E005	Total Dissolved Solids	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	1,660	746
37	LGU	E005	Antimony, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.003	0.00100
37	LGU	E005	Arsenic, total	mg/L	03/31/21 - 05/08/24	13	0	CI around median	0.034	0.0600
37	LGU	E005	Barium, total	mg/L	03/31/21 - 05/08/24	13	0	CB around linear reg	0.309	0.520
37	LGU	E005	Beryllium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.001	0.001
37	LGU	E005	Boron, total	mg/L	03/31/21 - 05/08/24	13	0	CB around linear reg	1.73	2.45
37	LGU	E005	Cadmium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0005	0.001
37	LGU	E005	Chloride, total	mg/L	03/31/21 - 05/08/24	13	0	CI around mean	41.3	82.0
37	LGU	E005	Chromium, total	mg/L	03/31/21 - 05/08/24	13	92	CB around T-S line	0.0015	0.0200
37	LGU	E005	Cobalt, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.001	0.00400
37	LGU	E005	Fluoride, total	mg/L	03/31/21 - 05/08/24	13	8	CI around mean	0.567	1.14
37	LGU	E005	Lead, total	mg/L	03/31/21 - 05/08/24	13	77	CI around median	0.0005	0.00600
37	LGU	E005	Lithium, total	mg/L	03/31/21 - 05/08/24	13	92	CI around median	0.003	0.0300
37	LGU	E005	Mercury, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0002	0.0002
37	LGU	E005	Molybdenum, total	mg/L	03/31/21 - 05/08/24	13	92	CI around median	0.0015	0.0200
37	LGU	E005	pH (field)	SU	03/31/21 - 05/08/24	13	0	CI around mean	6.9/7.1	6.8/7.8
37	LGU	E005	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 05/08/24	12	0	CI around mean	0.934	1.90

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 2, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
37	LGU	E005	Selenium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.0025	0.001
37	LGU	E005	Sulfate, total	mg/L	03/31/21 - 05/08/24	13	0	CB around T-S line	222	227
37	LGU	E005	Thallium, total	mg/L	03/31/21 - 05/08/24	13	100	All ND - Last	0.002	0.002
37	LGU	E005	Total Dissolved Solids	mg/L	03/31/21 - 05/08/24	13	0	CB around linear reg	839	746
38	UA	E005	Antimony, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.003	0.00100
38	UA	E005	Arsenic, total	mg/L	03/30/21 - 05/08/24	13	0	CB around linear reg	0.0273	0.0600
38	UA	E005	Barium, total	mg/L	03/30/21 - 05/08/24	13	0	CB around T-S line	-0.0435	0.520
38	UA	E005	Beryllium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.001	0.001
38	UA	E005	Boron, total	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	0.417	2.45
38	UA	E005	Cadmium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0005	0.001
38	UA	E005	Chloride, total	mg/L	03/30/21 - 05/08/24	13	0	CB around linear reg	13.9	82.0
38	UA	E005	Chromium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.005	0.0200
38	UA	E005	Cobalt, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.001	0.00400
38	UA	E005	Fluoride, total	mg/L	03/30/21 - 05/08/24	13	8	CI around geomean	0.35	1.14
38	UA	E005	Lead, total	mg/L	03/30/21 - 05/08/24	13	92	CI around median	0.0005	0.00600
38	UA	E005	Lithium, total	mg/L	03/30/21 - 05/08/24	13	54	CI around median	0.003	0.0300
38	UA	E005	Mercury, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0002	0.0002
38	UA	E005	Molybdenum, total	mg/L	03/30/21 - 05/08/24	13	38	CI around mean	0.00241	0.0200
38	UA	E005	pH (field)	SU	03/30/21 - 05/08/24	13	0	CI around mean	6.9/7.1	6.8/7.8
38	UA	E005	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 05/08/24	11	0	CI around mean	0.986	1.90
38	UA	E005	Selenium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0025	0.001
38	UA	E005	Sulfate, total	mg/L	03/30/21 - 05/08/24	13	92	CB around T-S line	-0.857	227
38	UA	E005	Thallium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.002	0.002
38	UA	E005	Total Dissolved Solids	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	503	746
40	UA	E005	Antimony, total	mg/L	03/31/21 - 05/07/24	13	100	All ND - Last	0.003	0.00100
40	UA	E005	Arsenic, total	mg/L	03/31/21 - 05/07/24	13	0	CI around mean	0.0174	0.0600
40	UA	E005	Barium, total	mg/L	03/31/21 - 05/07/24	13	0	CI around mean	0.0292	0.520

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 2, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
40	UA	E005	Beryllium, total	mg/L	03/31/21 - 05/07/24	13	100	All ND - Last	0.001	0.001
40	UA	E005	Boron, total	mg/L	03/31/21 - 05/07/24	13	0	CI around mean	19.9	2.45
40	UA	E005	Cadmium, total	mg/L	03/31/21 - 05/07/24	13	92	CI around median	0.0005	0.001
40	UA	E005	Chloride, total	mg/L	03/31/21 - 05/07/24	13	0	CB around linear reg	6.46	82.0
40	UA	E005	Chromium, total	mg/L	03/31/21 - 05/07/24	13	100	All ND - Last	0.005	0.0200
40	UA	E005	Cobalt, total	mg/L	03/31/21 - 05/07/24	13	0	CI around mean	0.00535	0.00400
40	UA	E005	Fluoride, total	mg/L	03/31/21 - 05/07/24	13	85	CI around median	0.1	1.14
40	UA	E005	Lead, total	mg/L	03/31/21 - 05/07/24	13	100	All ND - Last	0.0005	0.00600
40	UA	E005	Lithium, total	mg/L	03/31/21 - 05/07/24	13	0	CI around median	0.76	0.0300
40	UA	E005	Mercury, total	mg/L	03/31/21 - 05/07/24	13	100	All ND - Last	0.0002	0.0002
40	UA	E005	Molybdenum, total	mg/L	03/31/21 - 05/07/24	13	0	CI around mean	0.058	0.0200
40	UA	E005	pH (field)	SU	03/31/21 - 05/07/24	12	0	CI around mean	6.4/6.6	6.8/7.8
40	UA	E005	Radium 226 + Radium 228, total	pCi/L	03/31/21 - 05/07/24	12	0	CI around mean	0.729	1.90
40	UA	E005	Selenium, total	mg/L	03/31/21 - 05/07/24	13	100	All ND - Last	0.0025	0.001
40	UA	E005	Sulfate, total	mg/L	03/31/21 - 05/07/24	13	0	CB around linear reg	2,920	227
40	UA	E005	Thallium, total	mg/L	03/31/21 - 05/07/24	13	85	CI around median	0.002	0.002
40	UA	E005	Total Dissolved Solids	mg/L	03/31/21 - 05/07/24	13	0	CI around mean	4,430	746
41	UA	E005	Antimony, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.003	0.00100
41	UA	E005	Arsenic, total	mg/L	03/30/21 - 05/08/24	13	0	CB around linear reg	0.0109	0.0600
41	UA	E005	Barium, total	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	0.231	0.520
41	UA	E005	Beryllium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.001	0.001
41	UA	E005	Boron, total	mg/L	03/30/21 - 05/08/24	13	0	CB around linear reg	2.92	2.45
41	UA	E005	Cadmium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0005	0.001
41	UA	E005	Chloride, total	mg/L	03/30/21 - 05/08/24	13	0	CB around linear reg	46.2	82.0
41	UA	E005	Chromium, total	mg/L	03/30/21 - 05/08/24	13	92	CI around median	0.0015	0.0200
41	UA	E005	Cobalt, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.001	0.00400
41	UA	E005	Fluoride, total	mg/L	03/30/21 - 05/08/24	13	8	CI around median	0.41	1.14

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 2, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
41	UA	E005	Lead, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0005	0.00600
41	UA	E005	Lithium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.005	0.0300
41	UA	E005	Mercury, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0002	0.0002
41	UA	E005	Molybdenum, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.005	0.0200
41	UA	E005	pH (field)	SU	03/30/21 - 05/08/24	13	0	CI around mean	7.0/7.2	6.8/7.8
41	UA	E005	Radium 226 + Radium 228, total	pCi/L	04/20/21 - 05/08/24	11	0	CI around mean	1.12	1.90
41	UA	E005	Selenium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.0025	0.001
41	UA	E005	Sulfate, total	mg/L	03/30/21 - 05/08/24	13	85	CI around median	1	227
41	UA	E005	Thallium, total	mg/L	03/30/21 - 05/08/24	13	100	All ND - Last	0.002	0.002
41	UA	E005	Total Dissolved Solids	mg/L	03/30/21 - 05/08/24	13	0	CI around mean	604	746

Notes:
Lower Confidence Limit (LCL) or Upper Confidence Limit (UCL) exceeded the statistical background value
HSU = hydrostratigraphic unit:
LGU = Lower Groundwater Unit
UA = Uppermost Aquifer
mg/L = milligrams per liter
ND = non-detect
pCi/L = picocuries per liter
SU = standard units
Sample Count = number of samples from Sampled Date Range used to calculate the Statistical Result
Statistical Calculation = method used to calculate the statistical result:

- All ND - Last = All results were below the reporting limit, and the last determined reporting limit is shown
- CB around T-S line = Confidence band around Thiel-Sen line
- CB around linear reg = Confidence band around linear regression
- CI around geomean = Confidence interval around the geometric mean
- CI around mean = Confidence interval around the mean
- CI around median = Confidence interval around the median
- Most recent sample = Result for the most recently collected sample used due to insufficient data

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

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
02	LGU	E006	Antimony, total	mg/L	--	--	--	--	NS ²	0.00100
02	LGU	E006	Arsenic, total	mg/L	--	--	--	--	NS ²	0.0600
02	LGU	E006	Barium, total	mg/L	--	--	--	--	NS ²	0.520
02	LGU	E006	Beryllium, total	mg/L	--	--	--	--	NS ²	0.001
02	LGU	E006	Boron, total	mg/L	--	--	--	--	NS ²	2.45
02	LGU	E006	Cadmium, total	mg/L	--	--	--	--	NS ²	0.001
02	LGU	E006	Chloride, total	mg/L	--	--	--	--	NS ²	82.0
02	LGU	E006	Chromium, total	mg/L	--	--	--	--	NS ²	0.0200
02	LGU	E006	Cobalt, total	mg/L	--	--	--	--	NS ²	0.00400
02	LGU	E006	Fluoride, total	mg/L	--	--	--	--	NS ²	1.14
02	LGU	E006	Lead, total	mg/L	--	--	--	--	NS ²	0.00600
02	LGU	E006	Lithium, total	mg/L	--	--	--	--	NS ²	0.0300
02	LGU	E006	Mercury, total	mg/L	--	--	--	--	NS ²	0.0002
02	LGU	E006	Molybdenum, total	mg/L	--	--	--	--	NS ²	0.0200
02	LGU	E006	pH (field)	SU	--	--	--	--	NS ²	6.8/7.8
02	LGU	E006	Radium 226 + Radium 228, total	pCi/L	--	--	--	--	NS ²	1.90
02	LGU	E006	Selenium, total	mg/L	--	--	--	--	NS ²	0.001
02	LGU	E006	Sulfate, total	mg/L	--	--	--	--	NS ²	227
02	LGU	E006	Thallium, total	mg/L	--	--	--	--	NS ²	0.002
02	LGU	E006	Total Dissolved Solids	mg/L	--	--	--	--	NS ²	746
03R	LGU	E006	Antimony, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.003	0.00100
03R	LGU	E006	Arsenic, total	mg/L	03/30/21 - 07/31/24	14	0	CI around geomean	0.00508	0.0600
03R	LGU	E006	Barium, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	0.291	0.520
03R	LGU	E006	Beryllium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.001	0.001
03R	LGU	E006	Boron, total	mg/L	03/30/21 - 07/31/24	14	0	CB around linear reg	26.9	2.45
03R	LGU	E006	Cadmium, total	mg/L	03/30/21 - 07/31/24	14	79	CI around median	0.0005	0.001
03R	LGU	E006	Chloride, total	mg/L	03/30/21 - 07/31/24	14	2	CB around linear reg	21	82.0

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
03R	LGU	E006	Chromium, total	mg/L	03/30/21 - 07/31/24	14	86	CB around T-S line	0.0015	0.0200
03R	LGU	E006	Cobalt, total	mg/L	03/30/21 - 07/31/24	14	86	CI around median	0.001	0.00400
03R	LGU	E006	Fluoride, total	mg/L	03/30/21 - 07/31/24	14	7	CI around mean	0.443	1.14
03R	LGU	E006	Lead, total	mg/L	03/30/21 - 07/31/24	14	57	CI around median	0.001	0.00600
03R	LGU	E006	Lithium, total	mg/L	03/30/21 - 07/31/24	14	86	CB around T-S line	0.003	0.0300
03R	LGU	E006	Mercury, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0002	0.0002
03R	LGU	E006	Molybdenum, total	mg/L	03/30/21 - 07/31/24	14	0	CB around linear reg	0.328	0.0200
03R	LGU	E006	pH (field)	SU	03/30/21 - 07/31/24	14	0	CI around mean	7.2/7.4	6.8/7.8
03R	LGU	E006	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 07/31/24	12	0	CI around mean	1.07	1.90
03R	LGU	E006	Selenium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0025	0.001
03R	LGU	E006	Sulfate, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	491	227
03R	LGU	E006	Thallium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.002	0.002
03R	LGU	E006	Total Dissolved Solids	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	1,100	746
04	UA	E006	Antimony, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.003	0.00100
04	UA	E006	Arsenic, total	mg/L	03/30/21 - 07/31/24	14	7	CI around geomean	0.0055	0.0600
04	UA	E006	Barium, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	0.222	0.520
04	UA	E006	Beryllium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.001	0.001
04	UA	E006	Boron, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	8.46	2.45
04	UA	E006	Cadmium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0005	0.001
04	UA	E006	Chloride, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	10.2	82.0
04	UA	E006	Chromium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.005	0.0200
04	UA	E006	Cobalt, total	mg/L	03/30/21 - 07/31/24	14	93	Most recent sample	0.001	0.00400
04	UA	E006	Fluoride, total	mg/L	03/30/21 - 07/31/24	14	7	CI around median	0.3	1.14
04	UA	E006	Lead, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0005	0.00600
04	UA	E006	Lithium, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	0.0463	0.0300
04	UA	E006	Mercury, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0002	0.0002
04	UA	E006	Molybdenum, total	mg/L	03/30/21 - 07/31/24	14	0	CB around linear reg	0.0334	0.0200

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
04	UA	E006	pH (field)	SU	03/30/21 - 07/31/24	14	0	CI around mean	7.4/7.6	6.8/7.8
04	UA	E006	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 07/31/24	12	0	CI around mean	0.735	1.90
04	UA	E006	Selenium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0025	0.001
04	UA	E006	Sulfate, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	34.4	227
04	UA	E006	Thallium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.002	0.002
04	UA	E006	Total Dissolved Solids	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	367	746
05	UA	E006	Antimony, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.003	0.00100
05	UA	E006	Arsenic, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.001	0.0600
05	UA	E006	Barium, total	mg/L	03/30/21 - 08/01/24	14	0	CI around mean	0.0225	0.520
05	UA	E006	Beryllium, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.001	0.001
05	UA	E006	Boron, total	mg/L	03/30/21 - 08/01/24	14	0	CI around mean	18	2.45
05	UA	E006	Cadmium, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.0005	0.001
05	UA	E006	Chloride, total	mg/L	03/30/21 - 08/01/24	14	2	CI around mean	7.44	82.0
05	UA	E006	Chromium, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.005	0.0200
05	UA	E006	Cobalt, total	mg/L	03/30/21 - 08/01/24	14	86	CI around median	0.001	0.00400
05	UA	E006	Fluoride, total	mg/L	03/30/21 - 08/01/24	14	7	CB around linear reg	0.568	1.14
05	UA	E006	Lead, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.0005	0.00600
05	UA	E006	Lithium, total	mg/L	03/30/21 - 08/01/24	14	0	CI around mean	0.0866	0.0300
05	UA	E006	Mercury, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.0002	0.0002
05	UA	E006	Molybdenum, total	mg/L	03/30/21 - 08/01/24	14	0	CB around linear reg	0.0402	0.0200
05	UA	E006	pH (field)	SU	03/30/21 - 08/01/24	14	0	CB around linear reg	7.4/7.8	6.8/7.8
05	UA	E006	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 08/01/24	12	0	CI around geomean	0.105	1.90
05	UA	E006	Selenium, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.0025	0.001
05	UA	E006	Sulfate, total	mg/L	03/30/21 - 08/01/24	14	0	CI around median	224	227
05	UA	E006	Thallium, total	mg/L	03/30/21 - 08/01/24	14	100	All ND - Last	0.002	0.002
05	UA	E006	Total Dissolved Solids	mg/L	03/30/21 - 08/01/24	14	0	CI around mean	534	746
07R	UA	E006	Antimony, total	mg/L	--	--	--	--	NS ²	0.00100

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07R	UA	E006	Arsenic, total	mg/L	--	--	--	--	NS ²	0.0600
07R	UA	E006	Barium, total	mg/L	--	--	--	--	NS ²	0.520
07R	UA	E006	Beryllium, total	mg/L	--	--	--	--	NS ²	0.001
07R	UA	E006	Boron, total	mg/L	--	--	--	--	NS ²	2.45
07R	UA	E006	Cadmium, total	mg/L	--	--	--	--	NS ²	0.001
07R	UA	E006	Chloride, total	mg/L	--	--	--	--	NS ²	82.0
07R	UA	E006	Chromium, total	mg/L	--	--	--	--	NS ²	0.0200
07R	UA	E006	Cobalt, total	mg/L	--	--	--	--	NS ²	0.00400
07R	UA	E006	Fluoride, total	mg/L	--	--	--	--	NS ²	1.14
07R	UA	E006	Lead, total	mg/L	--	--	--	--	NS ²	0.00600
07R	UA	E006	Lithium, total	mg/L	--	--	--	--	NS ²	0.0300
07R	UA	E006	Mercury, total	mg/L	--	--	--	--	NS ²	0.0002
07R	UA	E006	Molybdenum, total	mg/L	--	--	--	--	NS ²	0.0200
07R	UA	E006	pH (field)	SU	--	--	--	--	NS ²	6.8/7.8
07R	UA	E006	Radium 226 + Radium 228, total	pCi/L	--	--	--	--	NS ²	1.90
07R	UA	E006	Selenium, total	mg/L	--	--	--	--	NS ²	0.001
07R	UA	E006	Sulfate, total	mg/L	--	--	--	--	NS ²	227
07R	UA	E006	Thallium, total	mg/L	--	--	--	--	NS ²	0.002
07R	UA	E006	Total Dissolved Solids	mg/L	--	--	--	--	NS ²	746
08R	UA	E006	Antimony, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.003	0.00100
08R	UA	E006	Arsenic, total	mg/L	03/30/21 - 07/31/24	14	0	CB around linear reg	0.0282	0.0600
08R	UA	E006	Barium, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	0.0556	0.520
08R	UA	E006	Beryllium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.001	0.001
08R	UA	E006	Boron, total	mg/L	03/30/21 - 07/31/24	14	0	CI around median	29.8	2.45
08R	UA	E006	Cadmium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0005	0.001
08R	UA	E006	Chloride, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	5.1	82.0
08R	UA	E006	Chromium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.005	0.0200

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
08R	UA	E006	Cobalt, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.001	0.00400
08R	UA	E006	Fluoride, total	mg/L	03/30/21 - 07/31/24	14	79	CI around median	0.1	1.14
08R	UA	E006	Lead, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0005	0.00600
08R	UA	E006	Lithium, total	mg/L	03/30/21 - 07/31/24	14	0	CI around median	0.288	0.0300
08R	UA	E006	Mercury, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0002	0.0002
08R	UA	E006	Molybdenum, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	0.197	0.0200
08R	UA	E006	pH (field)	SU	03/30/21 - 07/31/24	14	0	CI around mean	7.1/7.9	6.8/7.8
08R	UA	E006	Radium 226 + Radium 228, total	pCi/L	04/21/21 - 07/31/24	12	0	CI around mean	0.443	1.90
08R	UA	E006	Selenium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0025	0.001
08R	UA	E006	Sulfate, total	mg/L	03/30/21 - 07/31/24	14	0	CB around linear reg	578	227
08R	UA	E006	Thallium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.002	0.002
08R	UA	E006	Total Dissolved Solids	mg/L	03/30/21 - 07/31/24	14	0	CI around median	1,110	746
17	UA	E006	Antimony, total	mg/L	--	--	--	--	NS ²	0.00100
17	UA	E006	Arsenic, total	mg/L	--	--	--	--	NS ²	0.0600
17	UA	E006	Barium, total	mg/L	--	--	--	--	NS ²	0.520
17	UA	E006	Beryllium, total	mg/L	--	--	--	--	NS ²	0.001
17	UA	E006	Boron, total	mg/L	--	--	--	--	NS ²	2.45
17	UA	E006	Cadmium, total	mg/L	--	--	--	--	NS ²	0.001
17	UA	E006	Chloride, total	mg/L	--	--	--	--	NS ²	82.0
17	UA	E006	Chromium, total	mg/L	--	--	--	--	NS ²	0.0200
17	UA	E006	Cobalt, total	mg/L	--	--	--	--	NS ²	0.00400
17	UA	E006	Fluoride, total	mg/L	--	--	--	--	NS ²	1.14
17	UA	E006	Lead, total	mg/L	--	--	--	--	NS ²	0.00600
17	UA	E006	Lithium, total	mg/L	--	--	--	--	NS ²	0.0300
17	UA	E006	Mercury, total	mg/L	--	--	--	--	NS ²	0.0002
17	UA	E006	Molybdenum, total	mg/L	--	--	--	--	NS ²	0.0200
17	UA	E006	pH (field)	SU	--	--	--	--	NS ²	6.8/7.8

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
17	UA	E006	Radium 226 + Radium 228, total	pCi/L	--	--	--	--	NS ²	1.90
17	UA	E006	Selenium, total	mg/L	--	--	--	--	NS ²	0.001
17	UA	E006	Sulfate, total	mg/L	--	--	--	--	NS ²	227
17	UA	E006	Thallium, total	mg/L	--	--	--	--	NS ²	0.002
17	UA	E006	Total Dissolved Solids	mg/L	--	--	--	--	NS ²	746
20	UA	E006	Antimony, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.003	0.00100
20	UA	E006	Arsenic, total	mg/L	03/30/21 - 07/31/24	14	64	CI around median	0.001	0.0600
20	UA	E006	Barium, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	0.018	0.520
20	UA	E006	Beryllium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.001	0.001
20	UA	E006	Boron, total	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	0.745	2.45
20	UA	E006	Cadmium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0005	0.001
20	UA	E006	Chloride, total	mg/L	03/30/21 - 07/31/24	14	14	CI around median	4	82.0
20	UA	E006	Chromium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.005	0.0200
20	UA	E006	Cobalt, total	mg/L	03/30/21 - 07/31/24	14	86	CI around median	0.001	0.00400
20	UA	E006	Fluoride, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.1	1.14
20	UA	E006	Lead, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0005	0.00600
20	UA	E006	Lithium, total	mg/L	03/30/21 - 07/31/24	14	0	CI around geomean	0.0205	0.0300
20	UA	E006	Mercury, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0002	0.0002
20	UA	E006	Molybdenum, total	mg/L	03/30/21 - 07/31/24	14	93	CB around T-S line	0.0015	0.0200
20	UA	E006	pH (field)	SU	03/30/21 - 07/31/24	14	0	CI around median	6.9/7.1	6.8/7.8
20	UA	E006	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 07/31/24	12	0	CI around mean	0.453	1.90
20	UA	E006	Selenium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.0025	0.001
20	UA	E006	Sulfate, total	mg/L	03/30/21 - 07/31/24	14	0	CI around geomean	75.5	227
20	UA	E006	Thallium, total	mg/L	03/30/21 - 07/31/24	14	100	All ND - Last	0.002	0.002
20	UA	E006	Total Dissolved Solids	mg/L	03/30/21 - 07/31/24	14	0	CI around mean	407	746
34	LGU	E006	Antimony, total	mg/L	--	--	--	--	NS ⁷	0.00100
34	LGU	E006	Arsenic, total	mg/L	--	--	--	--	NS ⁷	0.0600

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
34	LGU	E006	Barium, total	mg/L	--	--	--	--	NS ⁷	0.520
34	LGU	E006	Beryllium, total	mg/L	--	--	--	--	NS ⁷	0.001
34	LGU	E006	Boron, total	mg/L	--	--	--	--	NS ⁷	2.45
34	LGU	E006	Cadmium, total	mg/L	--	--	--	--	NS ⁷	0.001
34	LGU	E006	Chloride, total	mg/L	--	--	--	--	NS ⁷	82.0
34	LGU	E006	Chromium, total	mg/L	--	--	--	--	NS ⁷	0.0200
34	LGU	E006	Cobalt, total	mg/L	--	--	--	--	NS ⁷	0.00400
34	LGU	E006	Fluoride, total	mg/L	--	--	--	--	NS ⁷	1.14
34	LGU	E006	Lead, total	mg/L	--	--	--	--	NS ⁷	0.00600
34	LGU	E006	Lithium, total	mg/L	--	--	--	--	NS ⁷	0.0300
34	LGU	E006	Mercury, total	mg/L	--	--	--	--	NS ⁷	0.0002
34	LGU	E006	Molybdenum, total	mg/L	--	--	--	--	NS ⁷	0.0200
34	LGU	E006	pH (field)	SU	--	--	--	--	NS ⁷	6.8/7.8
34	LGU	E006	Radium 226 + Radium 228, total	pCi/L	--	--	--	--	NS ⁷	1.90
34	LGU	E006	Selenium, total	mg/L	--	--	--	--	NS ⁷	0.001
34	LGU	E006	Sulfate, total	mg/L	--	--	--	--	NS ⁷	227
34	LGU	E006	Thallium, total	mg/L	--	--	--	--	NS ⁷	0.002
34	LGU	E006	Total Dissolved Solids	mg/L	--	--	--	--	NS ⁷	746
36	UA	E006	Antimony, total	mg/L	--	--	--	--	NS ²	0.00100
36	UA	E006	Arsenic, total	mg/L	--	--	--	--	NS ²	0.0600
36	UA	E006	Barium, total	mg/L	--	--	--	--	NS ²	0.520
36	UA	E006	Beryllium, total	mg/L	--	--	--	--	NS ²	0.001
36	UA	E006	Boron, total	mg/L	--	--	--	--	NS ²	2.45
36	UA	E006	Cadmium, total	mg/L	--	--	--	--	NS ²	0.001
36	UA	E006	Chloride, total	mg/L	--	--	--	--	NS ²	82.0
36	UA	E006	Chromium, total	mg/L	--	--	--	--	NS ²	0.0200
36	UA	E006	Cobalt, total	mg/L	--	--	--	--	NS ²	0.00400

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Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
36	UA	E006	Fluoride, total	mg/L	--	--	--	--	NS ²	1.14
36	UA	E006	Lead, total	mg/L	--	--	--	--	NS ²	0.00600
36	UA	E006	Lithium, total	mg/L	--	--	--	--	NS ²	0.0300
36	UA	E006	Mercury, total	mg/L	--	--	--	--	NS ²	0.0002
36	UA	E006	Molybdenum, total	mg/L	--	--	--	--	NS ²	0.0200
36	UA	E006	pH (field)	SU	--	--	--	--	NS ²	6.8/7.8
36	UA	E006	Radium 226 + Radium 228, total	pCi/L	--	--	--	--	NS ²	1.90
36	UA	E006	Selenium, total	mg/L	--	--	--	--	NS ²	0.001
36	UA	E006	Sulfate, total	mg/L	--	--	--	--	NS ²	227
36	UA	E006	Thallium, total	mg/L	--	--	--	--	NS ²	0.002
36	UA	E006	Total Dissolved Solids	mg/L	--	--	--	--	NS ²	746
37	LGU	E006	Antimony, total	mg/L	--	--	--	--	NS ²	0.00100
37	LGU	E006	Arsenic, total	mg/L	--	--	--	--	NS ²	0.0600
37	LGU	E006	Barium, total	mg/L	--	--	--	--	NS ²	0.520
37	LGU	E006	Beryllium, total	mg/L	--	--	--	--	NS ²	0.001
37	LGU	E006	Boron, total	mg/L	--	--	--	--	NS ²	2.45
37	LGU	E006	Cadmium, total	mg/L	--	--	--	--	NS ²	0.001
37	LGU	E006	Chloride, total	mg/L	--	--	--	--	NS ²	82.0
37	LGU	E006	Chromium, total	mg/L	--	--	--	--	NS ²	0.0200
37	LGU	E006	Cobalt, total	mg/L	--	--	--	--	NS ²	0.00400
37	LGU	E006	Fluoride, total	mg/L	--	--	--	--	NS ²	1.14
37	LGU	E006	Lead, total	mg/L	--	--	--	--	NS ²	0.00600
37	LGU	E006	Lithium, total	mg/L	--	--	--	--	NS ²	0.0300
37	LGU	E006	Mercury, total	mg/L	--	--	--	--	NS ²	0.0002
37	LGU	E006	Molybdenum, total	mg/L	--	--	--	--	NS ²	0.0200
37	LGU	E006	pH (field)	SU	--	--	--	--	NS ²	6.8/7.8
37	LGU	E006	Radium 226 + Radium 228, total	pCi/L	--	--	--	--	NS ²	1.90

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
37	LGU	E006	Selenium, total	mg/L	--	--	--	--	NS ²	0.001
37	LGU	E006	Sulfate, total	mg/L	--	--	--	--	NS ²	227
37	LGU	E006	Thallium, total	mg/L	--	--	--	--	NS ²	0.002
37	LGU	E006	Total Dissolved Solids	mg/L	--	--	--	--	NS ²	746
38	UA	E006	Antimony, total	mg/L	03/30/21 - 07/30/24	14	100	All ND - Last	0.003	0.00100
38	UA	E006	Arsenic, total	mg/L	03/30/21 - 07/30/24	14	0	CB around linear reg	0.0286	0.0600
38	UA	E006	Barium, total	mg/L	03/30/21 - 07/30/24	14	0	CB around T-S line	-0.0626	0.520
38	UA	E006	Beryllium, total	mg/L	03/30/21 - 07/30/24	14	100	All ND - Last	0.001	0.001
38	UA	E006	Boron, total	mg/L	03/30/21 - 07/30/24	14	0	CI around geomean	0.422	2.45
38	UA	E006	Cadmium, total	mg/L	03/30/21 - 07/30/24	14	100	All ND - Last	0.0005	0.001
38	UA	E006	Chloride, total	mg/L	03/30/21 - 07/30/24	14	0	CB around linear reg	13.6	82.0
38	UA	E006	Chromium, total	mg/L	03/30/21 - 07/30/24	14	100	All ND - Last	0.005	0.0200
38	UA	E006	Cobalt, total	mg/L	03/30/21 - 07/30/24	14	100	All ND - Last	0.001	0.00400
38	UA	E006	Fluoride, total	mg/L	03/30/21 - 07/30/24	14	7	CI around geomean	0.352	1.14
38	UA	E006	Lead, total	mg/L	03/30/21 - 07/30/24	14	93	CI around median	0.0005	0.00600
38	UA	E006	Lithium, total	mg/L	03/30/21 - 07/30/24	14	57	CI around median	0.003	0.0300
38	UA	E006	Mercury, total	mg/L	03/30/21 - 07/30/24	14	100	All ND - Last	0.0002	0.0002
38	UA	E006	Molybdenum, total	mg/L	03/30/21 - 07/30/24	14	43	CI around mean	0.00245	0.0200
38	UA	E006	pH (field)	SU	03/30/21 - 07/30/24	14	0	CI around mean	6.9/7.1	6.8/7.8
38	UA	E006	Radium 226 + Radium 228, total	pCi/L	04/19/21 - 07/30/24	12	0	CI around mean	1.03	1.90
38	UA	E006	Selenium, total	mg/L	03/30/21 - 07/30/24	14	100	All ND - Last	0.0025	0.001
38	UA	E006	Sulfate, total	mg/L	03/30/21 - 07/30/24	14	93	CB around T-S line	-1.49	227
38	UA	E006	Thallium, total	mg/L	03/30/21 - 07/30/24	14	100	All ND - Last	0.002	0.002
38	UA	E006	Total Dissolved Solids	mg/L	03/30/21 - 07/30/24	14	0	CI around mean	506	746
41	UA	E006	Antimony, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.003	0.00100
41	UA	E006	Arsenic, total	mg/L	03/30/21 - 07/29/24	14	0	CB around linear reg	0.0103	0.0600
41	UA	E006	Barium, total	mg/L	03/30/21 - 07/29/24	14	0	CI around mean	0.232	0.520

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
41	UA	E006	Beryllium, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.001	0.001
41	UA	E006	Boron, total	mg/L	03/30/21 - 07/29/24	14	0	CB around linear reg	3.01	2.45
41	UA	E006	Cadmium, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.0005	0.001
41	UA	E006	Chloride, total	mg/L	03/30/21 - 07/29/24	14	0	CB around linear reg	45.5	82.0
41	UA	E006	Chromium, total	mg/L	03/30/21 - 07/29/24	14	93	CI around median	0.0015	0.0200
41	UA	E006	Cobalt, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.001	0.00400
41	UA	E006	Fluoride, total	mg/L	03/30/21 - 07/29/24	14	7	CI around median	0.41	1.14
41	UA	E006	Lead, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.0005	0.00600
41	UA	E006	Lithium, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.005	0.0300
41	UA	E006	Mercury, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.0002	0.0002
41	UA	E006	Molybdenum, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.005	0.0200
41	UA	E006	pH (field)	SU	03/30/21 - 07/29/24	14	0	CI around mean	7.0/7.2	6.8/7.8
41	UA	E006	Radium 226 + Radium 228, total	pCi/L	04/20/21 - 07/29/24	12	0	CI around mean	1.12	1.90
41	UA	E006	Selenium, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.0025	0.001
41	UA	E006	Sulfate, total	mg/L	03/30/21 - 07/29/24	14	86	CI around median	1	227
41	UA	E006	Thallium, total	mg/L	03/30/21 - 07/29/24	14	100	All ND - Last	0.002	0.002
41	UA	E006	Total Dissolved Solids	mg/L	03/30/21 - 07/29/24	14	0	CI around mean	605	746

ATTACHMENT B.
COMPARISON TO BACKGROUND - QUARTER 3, 2024
845 QUARTERLY REPORT
VERMILION POWER PLANT
NORTH ASH POND AND OLD EAST ASH POND
OAKWOOD, IL

Notes:

- = no data available

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

HSU = hydrostratigraphic unit:

 LGU = Lower Groundwater Unit

 UA = Uppermost Aquifer

mg/L = milligrams per liter

Missing Code (if applicable):

 NR¹ = Select parameters were not analyzed.

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

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

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

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

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

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

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

 PM¹ = Select parameters were not analyzed as the well purged dry during sample collection and did not sufficiently recover to sample for all parameters.

ND = non-detect

pCi/L = picocuries per liter

SU = standard units

Sample Count = number of samples from Sampled Date Range used to calculate the Statistical Result

Statistical Calculation = method used to calculate the statistical result:

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

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

 CB around linear reg = Confidence band around linear regression

 CI around geomean = Confidence interval around the geometric mean

 CI around mean = Confidence interval around the mean

 CI around median = Confidence interval around the median

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

Statistical Result = calculated in accordance with the Statistical Analysis Plan using constituent concentrations observed at each monitoring well during all sampling events within the specified date range

For pH, the values presented are the lower / upper limits of the background determination