



# Illinois Environmental Protection Agency

2520 West Iles Avenue • P.O. Box 19276 • Springfield, Illinois • 62794-9276 • 217-782-3397

## COAL COMBUSTION RESIDUALS GROUNDWATER, LEACHATE, ND FACILITY REPORTING FORM

This form must be used as a cover sheet for the notices and reports identified below as required by the facility's Coal Combustion Residuals (CCR) permit for any CCR Surface Impoundments (CCRSIs). All reports must be submitted to the Illinois EPA's Bureau of Land, Permit Section. All reports submitted to the Illinois EPA's Bureau of Land Permit Section must contain an original, plus a minimum of two copies.

**Note: This form is not to be used with permit applications. The facility's approved permit will state whether the document you are submitting is required as a report or an application.**

### 1.0 Facility Identification

Facility Name: Joliet #29 Generating Station

Facility Address: 1800 Channahon Road, Joliet, IL

Site ID #: 1970455041 Fed ID #: \_\_\_\_\_

### 2.0 Type of Submission

Check the appropriate heading. Only one heading may be checked for each corresponding submittal. Check the appropriate sub-heading, where applicable. Attach the original and all copies behind this form.

- LPC-160 Form (electronic reporting for each sampling event)
 

<u>Groundwater</u>	<u>Leachate</u>
_____ Quarterly - Enter 1, 2, 3, or 4	_____ Quarterly - Enter 1, 2, 3, or 4
<input type="checkbox"/> Semi Annual	<input type="checkbox"/> Semi Annual
<input type="checkbox"/> Annual	<input type="checkbox"/> Annual
  
- Groundwater Data (without LPC-160 Forms) (35 IAC 845.610(b)(3)(D))
  - \_\_\_\_\_ Quarterly - Enter 1, 2, 3, or 4
  - Semi Annual
  - Annual
  
- Well Construction Information
  - Well Construction Forms, Boring Logs and/or Abandonment Forms
  - Well Survey Data (e.g., Stick-up Elevation Data)
  
- Quarterly Fugitive Dust Complaint Report (35 IAC 845.500(b)(2)(B))
  
- Emergency Action Plan (35 IAC 845.520(f))
  
- Annual Consolidated Report (35 IAC 845.550(a))
  
- Notice of Confirmed Increase of Groundwater Exceedance from Re-sample (35 IAC 845.650(d))
  
- Notice of Plume Contamination Off-Sit (35 IAC 845.650(d)(2))
  
- Alternate Source Demonstration (35 IAC 845.650(e))

- Assessment      orrective Measures (35 IAC 845.660(a)(2))
  
- Corrective Action
  - Semi-Annual Report (35 IAC 845.670(a))
  - Corrective Action Completion Report (35 IAC 845.680(e))
  
- Closure Extension Progress Report (35 IAC 845.700(e))
  
- Monthly Closure by Removal Report (during active removal) (35 IAC 845.740(d))
  
- Annual Inflation Adjustment of Cost Estimates (35 IAC 845.940(a))
  
- Other (Identify)

---

---

---

**TRANSMITTAL**

To: Illinois Environmental Protection Agency  
DWPC – Permits Section (MC15)  
Attn: Part 845 Coal Combustion Residual Rule Submittal  
2520 W Iles Ave  
Springfield, IL 62704

From: Midwest Generation, LLC Joliet Station #29

Date: January 30, 2026

Re: Midwest Generation, LLC – Joliet #29 Generating Station  
Account No. W1970450047  
CCR Surface Impoundment Annual Consolidated Report

\*\*\*\*\*

In accordance with the requirements of Title 35 of the Illinois Administrative Code (“35 IAC”) Section 845.550, the Annual Consolidated Report is attached for the following CCR surface impoundment at Joliet #29 Generating Station:

<b>Pond ID</b>	<b>CCR Surface Impoundment Description</b>
W1970450047-02	Pond 2

The certification pages from the Hazard Potential Classification Assessment, Structural Stability Assessment, Safety Factor Assessment, and Inflow Design Flood Control System Plan have been provided in Attachment B. A full copy of these assessments can be found on our public website at [www.midwestgenerationllc.com](http://www.midwestgenerationllc.com). If you have any questions or require additional information regarding this submittal, please contact Jill Buckley at [Jill.Buckley@nrg.com](mailto:Jill.Buckley@nrg.com).

# 2025 ANNUAL CONSOLIDATED REPORT JOLIET 29 GENERATING STATION

## POND 2 – W1970450047-02

ATTACHMENT A – ANNUAL CCR FUGITIVE DUST CONTROL REPORT

ATTACHMENT B – ANNUAL INSPECTION REPORT

ATTACHMENT B.1 – HAZARD POTENTIAL CLASSIFICATION ASSESSMENT  
CERTIFICATION

ATTACHMENT B.2 – STRUCTURAL STABILITY ASSESSMENT CERTIFICATION

ATTACHMENT B.3 – SAFETY FACTOR ASSESSMENT CERTIFICATION

ATTACHMENT B.4 – INFLOW DESIGN FLOOD CONTROL PLAN

ATTACHMENT C – ANNUAL GROUNDWATER MONITORING AND CORRECTIVE  
ACTION REPORT

ATTACHMENT D – MONTHLY SURFACE IMPOUNDMENT WATER ELEVATIONS

ATTACHMENT A  
2025 ANNUAL CCR FUGITIVE DUST  
CONTROL REPORT

**Annual CCR Fugitive Dust Control Report**  
**Joliet #29 Generating Station**  
1800 Channahon Road, Joliet, Illinois

## ***1.0 Introduction***

---

On April 15, 2021, the Illinois Pollution Control Board adopted a new part of its waste disposal regulations creating state-wide standards for the disposal of coal combustion residuals (CCR) in surface impoundments, created by the generation of electricity by coal-fired power plants (the IL CCR Rule). These requirements include air criteria specified in Title 35 of the Illinois Administrative Code, §845.500, to address the potential pollution caused by windblown dust from CCR units.

The Joliet #29 Generating Station, operated by Midwest Generation, LLC (MWG), is located at 1800 Channahon Road, Joliet, Will County, Illinois. The facility is a retired natural gas-fired electric power generating station (formerly coal-fired) situated on approximately 297 acres located on the north side of the Des Plaines River. The two electric generating units, identified as Units 7 and 8, on the property were retired on September 1, 2023. The Rule applies to this facility due to the management of CCR that is generated from the combustion of coal. The CCR unit associated with the station is Ash Pond 2.

According to the IL CCR Rule, owners or operators of CCR units must adopt measures that will effectively minimize CCR from becoming airborne at the facility by developing and operating in accordance with a Fugitive Dust Control Plan (Plan) with adequate dust control measures. In this regard, a Plan was prepared that complies with the requirements as specified in §845.500(b)(1-7) of the IL CCR Rule and placed in the Joliet facility's operating record on October 31, 2021 per §845.800(d)(7). As required, the Plan was also posted to the publicly accessible internet site per §845.810(e).

In addition to the above and per §845.500(c), an Annual Fugitive Dust Control Report (Annual Report) must be completed that includes the following:

- Description of actions taken to control CCR fugitive dust, and
- The four quarterly fugitive dust complaint reports submitted under subsection (b)(2)(B)

The Annual Report must be submitted as part of the annual consolidated report required by §845.550. This document represents the 2025 Annual Report for Joliet 29 and will also be appropriately placed in the facility's operating record per §845.800(d)(7) and posted to the publicly accessible internet site per §845.810(e).

**Annual CCR Fugitive Dust Control Report**  
**Joliet #29 Generating Station**  
1800 Channahon Road, Joliet, Illinois

## ***2.0 Actions Taken to Control CCR Fugitive Dust***

---

As detailed in the Plan and reiterated below, the station has established procedures and inspection requirements which are implemented to minimize/eliminate airborne emissions from the potential fugitive dust sources. The results from inspections conducted and associated observations made during CCR handling activities are documented on logs maintained in the station's Environmental Department. The Joliet station converted the generating boilers to fire natural gas as a fuel source and ceased coal fuel use at the facility on March 20, 2016 and retired the electric generating units on September 1, 2023. As such, no generation of CCR materials occurred during the reporting period. As described below, there is no CCR remaining at Joliet 29 Station above de minimis quantities.

### ***2.1 Pond 2***

Removal of ash from Pond 2 was completed on November 22, 2019 so that Pond 2 only contains a de minimis quantity of ash, ash remaining in the interstitial spaces in the pond warning layer. The warning layer is comprised of sand and limestone. Upon completion of removal of ash from Pond 2, the geomembrane liner was inspected. Because of Illinois Public Act 101-171, signed into law on July 30, 2019, closure activities cannot be completed until a permit is obtained from the Illinois Environmental Protection Agency.

### ***2.2 Transport Roadways***

During removal of the CCR, truck drivers are instructed on the proper procedure for cleaning trucks and a vehicle speed limit is enforced at the facility. Ash material that may not have been adequately removed from the trucks has the potential to become airborne and ultimately be deposited on haul roads. To minimize CCR fugitive dust emissions, the roads were assessed during impoundment cleaning activities, and any observed accumulated ash material was promptly cleaned up and collected for off-site removal to an off-site licensed disposal facility.

No ash transport occurred during the reporting period.

## ***3.0 Fugitive CCR Dust Assessments***

---

Pursuant to §845.500(b)(3), assessments of the potential fugitive dust emission sources identified in the Joliet facility's CCR Fugitive Dust Control Plan (Plan) are conducted to assess the effectiveness of the Plan, if warranted. When required, the assessment includes observation of ash removal from the pond, temporary storage, and transport activities at the facility to confirm the adequacy of the control measures. If assessments are warranted, they are conducted on a

**Annual CCR Fugitive Dust Control Report**  
**Joliet #29 Generating Station**  
1800 Channahon Road, Joliet, Illinois

quarterly basis by an individual designated by the contact identified below. Observations made during each assessment are to be recorded on a form similar to the one included in Appendix B of the Joliet facility's CCR Fugitive Dust Control Plan.

No assessments were warranted during this period based on the weekly CCR impoundment inspections and lack of changes to operations at this unit.

No issues were identified during this Annual Report's period of record covering January through December 2025.

**Owner Representative/Responsible Person Contact Information:**

Mr. Phillip Raush  
Plant Manager  
815-207-5412

#### ***4.0 Record of Citizen Complaints***

---

Per the Rule, the Annual Report must include copies of the four quarterly fugitive dust complaint reports submitted under §845.500(b)(2)(B). The quarterly fugitive dust complaint reports contain a record of all citizen complaints that were received by the Joliet station with regard to fugitive dust emission incidents. In line with established protocols and within 24 hours of receipt, the station's environmental coordinator enters the citizen complaint into MWG's Environmental Management Information System (EMIS) database. The EMIS database then automatically forwards notice of the complaint to the station manager and corporate environmental department. Following initial evaluation of the complaint, MWG then conducts a thorough investigation to confirm the reported incident/conditions and implement corrective actions as may be warranted.

No complaints were registered during this Annual Report's period of record covering January through December 2025.

#### ***5.0 Summary of Corrective Actions Taken***

---

For the 2025 reporting year and based on continued monitoring and inspections as outlined in Section 2.0 and 3.0 and as required under the CCR rules, the established control measures remain effective in minimizing potential fugitive dust emissions. Moreover, this assertion is further validated by the lack of citizen complaints logged over this same period. Accordingly, no

**Annual CCR Fugitive Dust Control Report**  
**Joliet #29 Generating Station**  
1800 Channahon Road, Joliet, Illinois

corrective actions were undertaken during the past year, either as a result of internally identified deficiencies or from resolution of citizen complaints.

QUARTERLY FUGITIVE DUST  
COMPLAINT REPORTS





Midwest Generation, LLC  
Joliet Generating Station  
1800 Channahon Road  
Joliet, Illinois 60436

April 7, 2025

Illinois Environmental Protection Agency  
DWPC – Permits Section (MC 15)  
Attn: Part 845 Coal Combustion Residual Rule Submittal  
2520 W Iles Ave  
Springfield, IL 62704

**Re: Midwest Generation, LLC – Joliet 29 Generating Station**  
**Account No. W1970450047**  
**Pond ID: W1970450047-02**  
**CCR Surface Impoundment Quarterly Fugitive Dust Complaint Report**

Dear Sir or Madam:

In accordance with the requirements of Title 35 of the Illinois Administrative Code ("35 IAC") Section 845.500(b)(2)(B), this letter serves as the fugitive dust complaint report for First Quarter 2025 at Joliet 29 Generating Station. There were no complaints received from members of the public during the period January 1, 2025 through March 31, 2025.

If you have any questions or require additional information regarding this submittal, please contact Jill Buckley at [Jill.Buckley@nrg.com](mailto:Jill.Buckley@nrg.com).

Sincerely,

A handwritten signature in black ink, appearing to read "P. Raush".

Phillip Raush  
Plant Manager  
Joliet Generating Station



Midwest Generation, LLC  
Joliet Generating Station  
1800 Channahon Road  
Joliet, Illinois 60436

July 7, 2025

Illinois Environmental Protection Agency  
DWPC – Permits Section (MC 15)  
Attn: Part 845 Coal Combustion Residual Rule Submittal  
2520 W Iles Avenue  
Springfield, IL 62704

**Re: Midwest Generation, LLC – Joliet 29 Generating Station  
Account No. W1970450047  
Pond ID: W1970450047-02  
CCR Surface Impoundment Quarterly Fugitive Dust Complaint Report**

Dear Sir or Madam:

In accordance with the requirements of Title 35 of the Illinois Administrative Code (“35 IAC”) Section 845.500(b)(2)(B), this letter serves as the fugitive dust complaint report for Second Quarter 2025 at Joliet 29 Generating Station. There were no complaints received from members of the public during the period April 1, 2025 through June 30, 2025.

If you have any questions or require additional information regarding this submittal, please contact Jill Buckley at [Jill.Buckley@nrg.com](mailto:Jill.Buckley@nrg.com).

Sincerely,

Phillip Raush  
Plant Manager, Joliet Generating Station



Midwest Generation, LLC

Midwest Generation, LLC  
Joliet Generating Station  
1800 Channahon Road  
Joliet, Illinois 60436

October 3, 2025

Illinois Environmental Protection Agency  
Bureau of Land - # 33  
Permit Section  
2520 West Iles Avenue  
Springfield, IL 62704

**Re: Midwest Generation, LLC – Joliet 29 Generating Station  
Site ID: 1970455041  
Log No.: 2021-506  
CCR Surface Impoundment Quarterly Fugitive Dust Complaint Report**

Dear Sir or Madam:

In accordance with the requirements of Title 35 of the Illinois Administrative Code ("35 IAC") Section 845.500(b)(2)(B), this letter serves as the fugitive dust complaint report for Third Quarter 2025 at Joliet 29 Generating Station. There were no complaints received from members of the public during the period July 1, 2025 through September 30, 2025.

If you have any questions or require additional information regarding this submittal, please contact Jill Buckley at [Jill.Buckley@nrg.com](mailto:Jill.Buckley@nrg.com).

Sincerely,

A handwritten signature in black ink, appearing to read "P. Raush".

Phillip Raush  
Plant Manager, Joliet Generating Station



Midwest Generation, LLC  
Joliet Generating Station  
1800 Channahon Road  
Joliet, Illinois 60436

January 8, 2026

Illinois Environmental Protection Agency  
Bureau of Land - # 33  
Permit Section  
2520 West Iles Avenue  
Springfield, IL 62704

**Re: Midwest Generation, LLC – Joliet 29 Generating Station  
Site ID: 1970455041  
Log No.: 2021-506  
CCR Surface Impoundment Quarterly Fugitive Dust Complaint Report**

Dear Sir or Madam:

In accordance with the requirements of Title 35 of the Illinois Administrative Code (“35 IAC”) Section 845.500(b)(2)(B), this letter serves as the fugitive dust complaint report for Fourth Quarter 2025 at Joliet 29 Generating Station. There were no complaints received from members of the public during the period October 1, 2025 through December 31, 2025.

If you have any questions or require additional information regarding this submittal, please contact Jill Buckley at [Jill.Buckley@nrg.com](mailto:Jill.Buckley@nrg.com).

Sincerely,

for

Phillip Raush  
Plant Manager, Joliet Generating Station

**ATTACHMENT B**  
**2025 ANNUAL INSPECTION REPORT**

**ANNUAL INSPECTION REPORT**  
**ASH POND 2**  
**JOLIET STATION 29**  
**SEPTEMBER 2025**

This annual inspection report has been prepared pursuant to both Title 35 of the Illinois Administrative Code (35 IAC) Part 845 Section 845.540(b) and Title 40 of the Code of Federal Regulations (40 CFR) Section 257.83(b) for Ash Pond 2 (Pond 2) at Joliet Station 29 in Joliet, Illinois (the Station). The purpose of this project is to perform an annual inspection of Pond 2 by a licensed professional engineer to ensure that the design, construction, operation, and maintenance of the coal combustion residuals (CCR) unit is consistent with recognized and generally accepted good engineering standards. Civil & Environmental Consultants, Inc. (CEC) completed the following scope of services in preparing this annual inspection report:

- CEC reviewed the weekly and monthly inspection reports completed by qualified station personnel and the previous annual inspection report.
- CEC performed the annual inspection in accordance with the requirements of 35 IAC 845.540 and 40 CFR 257.83(b) including observations pertaining to the following:
  - Changes in Geometry: Observations of changes in the geometry of Ash Pond 2 since the previous annual inspection.
  - Instrumentation: Inspection of the location and type of existing instrumentation and documentation of the maximum recorded readings of each instrument since the previous annual inspection from records provided by the Station.
  - Capacity and Impounded Volume: Inspection observations for the approximate minimum, maximum, and present depth and elevation of the impounded water and CCR; storage capacity of the impounding structure at the time of the inspection; and the approximate volume of the impounded water and CCR at the time of the inspection.
  - Structural/Operational Observations: Inspection for actual or potential structural weakness of the CCR surface impoundment, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR surface impoundment and appurtenant structures.

- Other Changes: Inspection including change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.

Pond 2 is a CCR surface impoundment that only receives storm water. Placement of CCRs into Pond 2 ceased in 2016 and placement of process water ceased in 2021. CEC inspected Pond 2 on September 25, 2025, and at the time of our inspection, Pond 2 contained no CCRs. CEC inspected the pond and found no signs of distress that would suggest the stability or operation of the impounding structure is compromised.

## **1.0 CHANGES IN GEOMETRY**

The Pond 2 geometry was observed to be unchanged.

## **2.0 INSTRUMENTATION**

Other than a water level gauge, no instrumentation was reported or observed that would be associated with the hydraulic structures, impoundment embankments, and/or slope performance.

## **3.0 CAPACITY AND IMPOUNDED VOLUME**

The capacity and impounded volume of Pond 2 and estimated depth of impounded water and CCR are presented in Table 1, attached. Volumes and depths were determined by reviewing inspection reports, construction drawings, and from discussions with Station personnel.

## **4.0 STRUCTURAL/OPERATIONAL OBSERVATIONS**

Pond 2 was inspected for signs of distress that would have the potential to disrupt operation and safety of the pond. None were observed. Prior to the inspection, CEC reviewed the previous annual inspection report. This report did not identify conditions that indicate an actual or potential structural weakness. Weekly and monthly inspection reports were also reviewed and did not indicate an actual or potential structural weakness.

## **5.0 OTHER CHANGES**

Pond 2 was inspected for signs of other changes or distresses that would have the potential to disrupt operation and safety of the basins. Our inspection showed no distresses that would affect the operation and/or stability of Pond 2.

## 6.0 LIMITATIONS AND CERTIFICATION

This annual inspection report was prepared to meet the requirements of 35 IAC 845.540(b) and 40 CFR 257.83(b) and was prepared under the direction of Mr. M. Dean Jones, P.E.

By affixing my seal to this, I do hereby certify to the best of my knowledge, information, and belief that the information contained in this report is true and correct. I further certify I am licensed to practice in the State of Illinois and that it is within my professional expertise to verify the correctness of the information. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Seal:



Signature: Dean Jones

Name: M. Dean Jones, P.E.

Date of Certification: September 29, 2025

Illinois Professional Engineer No.: 062-051317

Expiration Date: November 30, 2025

**Table 1: Inspection Summary - Pond 2**

<b>Category</b>	<b>Regulation Reference</b>	<b>Evaluation</b>	<b>Recommended Action</b>
<b>Change in Geometry</b>	§845.450(b)(2)(A) §257.883(b)(2)(i)	None	None
<b>Instrumentation</b>	§845.450(b)(2)(B) §257.83(b)(2)(ii)	None	None
<b>Water Depth</b>	§845.450(b)(2)(C) §257.83(b)(2)(iii)	1.7 feet, minimum 2.8 feet, at inspection 3.0 feet, maximum	None
<b>CCR Depth</b>	§845.450(b)(2)(C) §257.83(b)(2)(iii)	0 feet	None
<b>Estimated Storage Capacity</b>	§845.450(b)(2)(D) §257.83(b)(2)(iv)	38.4 Acre Feet	None
<b>Impounded Water Volume</b>	§845.450(b)(2)(E) §257.83(b)(2)(v)	7.5 Acre Feet	None
<b>Impounded CCR Volume</b>	§845.450(b)(2)(E) §257.83(b)(2)(v)	0 Acre Feet	None
<b>Structural/Operational Observations</b>	§845.450(b)(2)(F) §257.83(b)(2)(vi)	None	None
<b>Other Changes</b>	§845.450(b)(2)(G) §257.83(b)(2)(vii)	None	None

**ATTACHMENT B.1**  
**2025 ANNUAL HAZARD POTENTIAL**  
**CLASSIFICATION CERTIFICATION**

a probable loss of human life, Ash Pond 2 is classified as a Class 2 CCR surface impoundment under its current operating condition pursuant to 35 Ill. Adm. Code 845.440(a)(1).

Table 6-1 presents the 2025 hazard potential classification assigned to Joliet 29 Ash Pond 2 under its current operating condition in accordance with 35 Ill. Adm. Code 845.440(a)(1).

**Table 6-1 – 2025 Illinois Hazard Potential Classification for Ash Pond 2 at the Joliet 29 Generating Station**

CCR Surface Impoundment	2025 Illinois Hazard Potential Classification
Ash Pond 2	Class 2

However, as noted above, the 2025 hazard potential classification for Ash Pond 2 does not reflect the probability of a hypothetical failure event associated with the pond and is not contingent upon the pond's structural stability. Indeed, the 2025 annual safety factor assessment conducted pursuant to 35 Ill. Adm. Code 845.460 (Ref. 4) shows that Ash Pond 2 is structurally stable under design operating conditions. Moreover, no visual signs of distress that could be indicative of dike instability were observed during S&L's August 26, 2025, condition assessment performed in support of the pond's 2025 annual structural stability assessment under 35 Ill. Adm. Code 845.450 (Ref. 3).

## 7.0 CERTIFICATION

I certify that:

- This hazard potential classification assessment was prepared by me or under my direct supervision.
- The work was conducted in accordance with the requirements of 35 Ill. Adm. Code 845.440.
- I am a registered professional engineer under the laws of the State of Illinois.

Certified By: Thomas Dehlin

Date: October 13, 2025

Seal:



Digitally signed by  
Thomas Dehlin  
Date: 2025.10.13  
21:32:46-05'00'

**ATTACHMENT B.2**  
**2025 ANNUAL STRUCTURAL STABILITY**  
**ASSESSMENT CERTIFICATION**

## 5.0 CERTIFICATION

I certify that:

- This structural stability assessment was prepared by me or under my direct supervision.
- The work was conducted in accordance with the requirements of 35 Ill. Adm. Code 845.450.
- I am a registered professional engineer under the laws of the State of Illinois.

Certified By: Thomas Dehlin

Date: October 13, 2025

Seal:



Digitally signed by  
Thomas Dehlin  
Date: 2025.10.13  
22:14:43-05'00'

**ATTACHMENT B.3**  
**2025 ANNUAL SAFETY FACTOR**  
**ASSESSMENT CERTIFICATION**

**Table 6-1 – 2025 Illinois CCR Rule Factors of Safety  
for Ash Pond 2 at the Joliet 29 Station**

Loading Condition	Ash Pond 2	Min. Allowable Factor of Safety
Long-Term, Maximum Storage Pool	≥ 1.50	<b>1.50</b>
Maximum Surcharge Pool	≥ 1.40	<b>1.40</b>
Seismic	≥ 1.00	<b>1.00</b>
Liquefaction	Note 1	<b>1.20</b>

Notes: 1) The embankment soils for Ash Pond 2 are not considered susceptible to liquefaction because saturation of the embankment soils is unlikely based on the installed geomembrane liner system and depth to groundwater. Thus, liquefaction safety factors are not reported.

## 7.0 CERTIFICATION

I certify that:

- This safety factor assessment was prepared by me or under my direct supervision.
- The work was conducted in accordance with the requirements of 35 Ill. Adm. Code 845.460.
- I am a registered professional engineer under the laws of the State of Illinois.

Certified By: Thomas Dehlin

Date: October 13, 2025

Seal:



Digitally signed  
by Thomas Dehlin  
Date: 2025.10.13  
21:47:56-05'00'

**ATTACHMENT B.4  
2025 ANNUAL INFLOW DESIGN FLOOD  
CONTROL SYSTEM PLAN  
CERTIFICATION**

## 7.0 CERTIFICATION

I certify that:

- This inflow design flood control system plan was prepared by me or under my direct supervision.
- The work was conducted in accordance with the requirements of 35 Ill. Adm. Code 845.510.
- I am a registered professional engineer under the laws of the State of Illinois.

Certified By: Thomas Dehlin

Date: October 13, 2025

Seal:



Digitally signed  
by Thomas Dehlin  
Date: 2025.10.13  
22:14:10-05'00'

ATTACHMENT C  
2025 ANNUAL GROUNDWATER  
MONITORING AND CORRECTIVE ACTION  
REPORT



ENVIRONMENTAL CONSULTATION & REMEDIATION

---

**KPRG and Associates, Inc.**

**ILLINOIS CCR COMPLIANCE  
ANNUAL GROUNDWATER MONITORING and  
CORRECTIVE ACTION REPORT - 2025**

**Midwest Generation, LLC  
Joliet #29 Generating Station  
1800 Channahon Rd.  
Joliet, Illinois**

Prepared By: **KPRG and Associates, Inc.  
14665 West Lisbon Road, Suite 1A  
Brookfield, WI 53005**

January 31, 2026

TABLE OF CONTENTS

1.0 INTRODUCTION and OVERVIEW ..... 1

2.0 ANNUAL STATUS SUMMARY ..... 2

    2.1 Summary of Actions and Submittals (Section 845.610(e)(2))..... 2

    2.2 Groundwater Data Summary (Section 845.610(e)(3)(A-F) ..... 3

TABLES

- 1 – Summary of CCR Groundwater Monitoring Data
- 2 – Proposed Statistical Background Concentrations and Site-specific Groundwater Protection Standards
- 3 – Summary of Groundwater Elevation Measurements
- 4 – Groundwater Flow Direction and Estimated Seepage Velocity/Flow Rate
- 5 – Groundwater Sample Collection Summary

FIGURE

- 1 – CCR Monitoring Network

ATTACHMENTS

- 1 – Monthly Potentiometric Maps

## 1.0 INTRODUCTION and OVERVIEW

Groundwater monitoring requirements in accordance with the Ill. Adm. Code Title 35, Part 845: Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments dated April 15, 2021 (State CCR Rule), have been completed for the ash pond monitoring wells located at the Midwest Generation, LLC (Midwest Generation) Joliet #29 Generating Station. The wells sampled were selected to meet the monitoring requirements of the State CCR Rule for Pond 2. The CCR monitoring well network around this pond consists of four monitoring wells (MW-03, MW-04, MW-05, and MW-10) as shown on Figure 1. Well MW-10 is an upgradient well. All CCR groundwater monitoring data available to date, which includes data from previous groundwater monitoring under the Federal CCR Rule, are provided in Table 1. As part of the Application for Initial Operating Permit – Joliet #29 Generating Station submitted on October 31, 2021 (Application), *proposed* statistical background concentration calculations along with *proposed* site-specific Groundwater Protection Standards (GWPSs) were submitted for Illinois Environmental Protection Agency (Agency) review/approval. Table 3 summarizes the *proposed* background statistical concentrations for each parameter along with the site-specific *proposed* GWPSs in accordance with Section 845.600(a)(2). These are currently still under review by the Agency and, therefore, are not finalized. However, for the purposes of evaluations required for the annual report, data comparisons will be presented relative to the “*proposed*” values for statistical background concentrations and site-specific GWPSs.

This overview of the 2025 groundwater monitoring period is provided in accordance with Section 845.610(e)(4). Each required item is discussed separately below.

- Section 845.610(e)(4)(A and B) – *Proposed* statistical background concentration calculations (see Table 3) were submitted to the Agency as part of the Application for Initial Operating Permit. This Application is currently still under Agency review. However, assuming that the Agency accepts the proposed background calculations, the groundwater monitoring for the 2025 reporting period has identified the following constituents with verified potential statistically significant increases (SSIs) above the *proposed* background concentrations. It is noted that other than those constituents identified in the next bullet, none of these potential SSI concentrations are above *proposed* site-specific GWPSs. The constituents and associated wells are:
  - Chloride: MW-05 (2<sup>nd</sup> quarter)
  - Fluoride: MW-10, MW-03 and MW-05 (3<sup>rd</sup> quarter), MW-04 (3<sup>rd</sup> and 4<sup>th</sup> quarters)
  - Total Dissolved Solids: MW-10 (1<sup>st</sup> and 2<sup>nd</sup> quarters), MW-03 (3<sup>rd</sup> and 4<sup>th</sup> quarters), MW-04 (3<sup>rd</sup> quarter) and MW-05 (2<sup>nd</sup> and 3<sup>rd</sup> quarters)
  - Barium: MW-03, MW-04 and MW-05 (1<sup>st</sup> through 4<sup>th</sup> quarters)
  - Cobalt: MW-04 (1<sup>st</sup> through 4<sup>th</sup> quarters)
  - Radium: MW-10 (2<sup>nd</sup> quarter), MW-03 (2<sup>nd</sup> and 4<sup>th</sup> quarters), MW-04 and MW-05 (2<sup>nd</sup> quarter)

Well MW-10 is the upgradient monitoring point.

- Section 845.610(e)(4)(C and D) – *Proposed* GWPSs in accordance with Section 845.600(a)(2) (see Table 3) were submitted to the Agency as part of the Application for Initial Operating Permit. This Application is currently still under review by the Agency. However, assuming that the Agency accepts the proposed GWPSs, the groundwater monitoring for the 2025 reporting period has identified the following constituents above the *proposed* GWPSs:
  - Cobalt: MW-04 (1<sup>st</sup> and 2<sup>nd</sup> quarters)
  - TDS: MW-05 (2<sup>nd</sup> quarter)
  - Calcium: MW-05 (2<sup>nd</sup> quarter)

Well MW-10 is the upgradient monitoring point.

- Section 845.610(e)(4)(E through H) – Pond 2 is currently not in corrective action.

## 2.0 ANNUAL STATUS SUMMARY

As discussed in Section 1.0 the CCR monitoring well network around Pond 2 consists of four monitoring wells (MW-03, MW-04, MW-05, and MW-10) as shown on Figure 1. Well MW-10 is an upgradient well. All CCR groundwater monitoring data available to date, which includes data from previous groundwater monitoring under the Federal CCR Rule, are provided in Table 1. The backup analytical packages have been previously provided as part of the 60-day submittal requirements. Table 2 summarizes the proposed background statistical concentrations for each parameter along with the site-specific *Proposed* GWPSs in accordance with Section 845.600(a)(2). These were included as part of the Initial Operating Permit Application referenced above, are currently still under review by the Agency and, therefore, are not finalized. However, for the purposes of evaluations required for this annual report, data comparisons will be presented relative to the “*proposed*” values for statistical background concentrations and site-specific GWPSs. This section provides the information specified under Section 845.610(e) (2-3).

### 2.1 Summary of Actions and Submittals (Section 845.610(e)(2))

The following key actions have been completed during the 2025 reporting period:

- Quarterly sampling of all parameters specified in Section 845.600(a) plus calcium and turbidity was completed and the associated 60-day data summary submittals were placed in the facilities operating record in accordance with Section 845.610(b)(3)(D).
- Water levels were recorded monthly for the specified CCR monitoring wells and pond water levels were concurrently recorded.

- Submittal of an amended Application for Initial Construction Permit for proceeding to formal clean closure of the regulated Unit via removal and off-site disposal at an approved landfill.

Key activities for the upcoming year include:

- Receipt of an approved Operating Permit which will facilitate finalization of the proposed statistical background concentrations and the proposed site-specific GWPSs. Once these are accepted/finalized by the Agency, formal groundwater data comparisons and evaluations can be made based on quarterly monitoring results relative to these comparison criteria.
- Receipt of an approved Construction Permit which will facilitate closure construction activities to commence for Pond 2.
- Continued quarterly groundwater monitoring/reporting.

## 2.2 Groundwater Data Summary (Section 845.610(e)(3)(A-F))

Identification of monitoring wells and associated constituent concentrations above the proposed site-specific GWPSs was included in Section 1.0. For the most recent round of groundwater monitoring (4<sup>th</sup> quarter 2025), there were no detections above the proposed GWPSs and therefore no aerial distribution map is provided.

There were no monitoring wells installed or decommissioned during this reporting period.

Water levels were recorded from the specified CCR monitoring wells on a monthly basis. The water levels are summarized in Table 3. Potentiometric surface maps for each round of monthly water levels are provided in Attachment 1. As noted above, groundwater flow beneath Pond 2 is consistently in a southerly direction. In accordance with Section 845.640(c)(2), groundwater flow direction and seepage velocity estimates for each round of water levels are provided in Table 4.

A summary of the number of groundwater samples collected for analysis for each CCR monitoring well along with sample dates is provided in Table 5.

*Proposed* statistical background concentration calculations (see Table 2) were submitted to the Agency as part of the Application for Initial Operating Permit. This Application is currently still under Agency review. However, assuming that the Agency accepts the *proposed* background calculations, the groundwater monitoring for the 2025 reporting period has identified the following constituents with potential statistically significant increases (SSIs) above the proposed background concentrations:

- Chloride: MW-05 (2<sup>nd</sup> quarter)
- Fluoride: MW-10, MW-03 and MW-05 (3<sup>rd</sup> quarter), MW-04 (3<sup>rd</sup> and 4<sup>th</sup> quarters)

- Total Dissolved Solids: MW-10 (1<sup>st</sup> and 2<sup>nd</sup> quarters), MW-03 (3<sup>rd</sup> and 4<sup>th</sup> quarters), MW-04 (3<sup>rd</sup> quarter) and MW-05 (2<sup>nd</sup> and 3<sup>rd</sup> quarters)
- Barium: MW-03, MW-04 and MW-05 (1<sup>st</sup> through 4<sup>th</sup> quarters)
- Cobalt: MW-04 (1<sup>st</sup> through 4<sup>th</sup> quarters)
- Radium: MW-10 (2<sup>nd</sup> quarter), MW-03 (2<sup>nd</sup> and 4<sup>th</sup> quarters), MW-04 and MW-05 (2<sup>nd</sup> quarter)

Well MW-10 is the upgradient monitoring point. As previously stated, other than those constituents identified in the second bullet in Section 1.0, none of these potential SSI concentrations are above *proposed* site-specific GWPSs.

## **TABLES**

Table 1. Groundwater Analytical Results - Midwest Generation, LLC, Joliet Station #29, Joliet, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228	Selenium	Thallium	Turbidity	
MW-10 upgradient	10/28/2015	0.47	100	200	0.41	7.04	84	790	< 0.0030	< 0.0010	0.041	^< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.013	< 0.00020	0.0060	0.2981	< 0.0025	< 0.0020	NA	
	2/10/2016	0.41	100	210	0.44	7.17	120	820	< 0.0030	0.0010	0.043	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.011	< 0.00020	0.0067	< 0.438	< 0.0025	< 0.0020	NA	
	5/12/2016	0.29	100	300	0.42	7.02	110	920	< 0.0030	< 0.0010	0.046	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.012	< 0.00020	0.0051	< 0.414	< 0.0025	< 0.0020	NA	
	8/31/2016	0.36	89	170	0.46	6.95	100	760	< 0.0030	< 0.0010	0.039	^< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.010	< 0.00020	0.0077	< 0.394	< 0.0025	< 0.0020	NA	
	11/2/2016	0.48	100	130	0.45	6.99	95	720	< 0.0030	0.0018	0.035	< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.0014	0.011	< 0.00020	0.0061	0.626	< 0.0025	< 0.0020	NA	
	2/6/2017	0.44	120	190	0.36	6.99	88	820	< 0.0030	0.0011	0.048	< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.00086	0.014	< 0.00020	0.0056	< 0.389	< 0.0025	< 0.0020	NA	
	4/26/2017	0.35	120	200	0.35	7.27	87	760	< 0.0030	0.0015	0.046	< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.0012	< 0.010	< 0.00020	0.0060	< 0.34	< 0.0025	< 0.0020	NA	
	6/14/2017	0.29	91	160	0.43	7.48	75	690	< 0.0030	< 0.0010	0.034	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.012	< 0.00020	0.0072	< 0.356	< 0.0025	< 0.0020	NA	
	8/2/2017	0.45	97	170	0.38	7.23	110	750	< 0.0030	0.0011	0.036	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.011	< 0.00020	0.0079	0.429	< 0.0025	< 0.0020	NA	
	10/18/2017	0.61	120	140	0.41	7.11	130	820	< 0.0030	0.0012	0.040	^< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.00059	0.013	< 0.00020	0.0066	< 0.422	< 0.0025	^< 0.0020	NA	
	4/24/2018	0.4	110	260	0.39	7.28	120	910	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/17/2018	0.63	120	180	0.42	7.30	110	810	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/24/2018 R	0.44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/7/2019	0.56	130	410	0.39	7.17	95	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/3/2019 R	NA	NA	230	NA	NA	NA	830	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/7/2019	0.35	90	130	0.36	7.40	59	650	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/20/2020	0.85	120	250	0.41	6.90	100	960	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/11/2020 R	0.26	NA	NA	NA	NA	NA	770	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/22/2020	0.34	110	230	0.41	7.11	93	850	< 0.0030	0.0010	0.043	^< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.011	< 0.00020	0.0057	NA	< 0.0025	< 0.0020	NA	
	5/18/2021	0.33	140	350	0.39	7.16	210	1200	< 0.0030	0.0014	0.060	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.015	< 0.00020	0.0055	< 0.480	< 0.0025	< 0.0020	3.73	
	6/29/2021 R	NA	160	420	NA	NA	190	1300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.49
	8/30/2021	0.28	120	330	0.37	7.56	170	990	^+< 0.0030	0.0012	0.051	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.012	< 0.00020	0.0065	0.51	< 0.0025	< 0.0020	9.30	
	11/16/2021	0.39	120	260	0.38	7.01	150	1000	< 0.0030	0.0012	0.049	^1+< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.011	< 0.00020	0.0066	0.692	< 0.0025	< 0.0020	5.59	
	3/3/2022	0.47	120	280	0.41	7.05	190	1000	< 0.0030	0.0014	0.055	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.013	< 0.00020	0.0066	< 0.40	< 0.0025	< 0.0020	2.86	
	5/26/2022	0.39	120	280	0.41	6.90	160	1000	< 0.0030	0.0013	0.046	^+< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	< 0.010	< 0.00020	0.0064	< 0.593	< 0.0025	< 0.0020	2.08	
	8/31/2022	0.33	110	240	0.41	6.58	160	970	< 0.0030	0.0012	0.042	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	< 0.010	< 0.00020	0.0057	0.534	< 0.0025	< 0.0020	2.93	
	11/9/2022	0.32	110	240	0.57	7.00	150	880	< 0.0030	0.0014	0.043	< 0.0010	< 0.00050	< 0.0050	< 0.0010	^+< 0.00050	0.010	< 0.00020	0.0055	0.728	< 0.0025	< 0.0020	19.60	
	12/20/2022 R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/28/2023	0.36	130	330	0.38	7.06	170	1200	< 0.0030	0.0012	0.053	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.013	< 0.00020	0.0058	< 0.787	< 0.0025	< 0.0020	17.13	
	5/3/2023	0.37	130	310	0.39	6.99	190	1100	< 0.0030	< 0.0010	0.053	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.014	< 0.00020	0.0068	< 0.487	< 0.0025	< 0.0020	2.60	
	7/20/2023	0.33	110	250	0.39	6.95	160	960	< 0.0030	< 0.0010	0.048	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.011	< 0.00020	0.0053	0.623	< 0.0025	< 0.0020	5.60	
	10/26/2023	0.40	120	300	0.41	6.96	160	1100	< 0.0030	0.0011	0.050	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.011	< 0.00020	0.0064	0.739	< 0.0025	< 0.0020	1.40	
	1/23/2024	0.49	110	260	0.37	6.96	160	970	^1+< 0.0030	0.0013	0.056	^1+< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.00064	0.014	< 0.00020	0.0067	0.720	< 0.0025	< 0.0020	82.70	
	5/22/2024	0.38	110	180	0.41	7.17	120	840	< 0.0030	< 0.0010	0.040	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.013	< 0.00020	0.0067	< 0.633	< 0.0025	< 0.0020	49.31	
	7/30/2024	0.44	120	170	0.38	7.58	150	880	< 0.0030	< 0.0010	0.045	< 0.0010	< 0.00050	< 0.0050	< 0.0010	^1+< 0.00050	0.013	< 0.00020	0.0071	0.455	< 0.0025	< 0.0020	2.27	
	10/29/2024	0.46	130	220	0.38	7.30	160	1000	< 0.0030	< 0.0010	0.048	< 0.0010	< 0.00050	< 0.0050	< 0.0010	^+< 0.00050	0.013	< 0.00020	0.0063	< 0.337	< 0.0025	< 0.0020	3.17	
	1/29/2025	0.50	140	250	0.40	7.13	150	1100	< 0.0030	0.0011	0.051	^1+< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.00089	0.015	< 0.00020	0.0066	< -0.0345	< 0.0025	< 0.0020	60.43	
	4/30/2025	0.38	120	280	0.42	7.27	170	1100	< 0.0030	< 0.0010	0.053	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.013	< 0.00020	0.0068	0.772	< 0.0025	< 0.0020	9.43	
	8/7/2025	0.35	110	240	0.60	7.01	180	1000	< 0.0030	< 0.0010	0.045	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.013	< 0.00020	0.0055	< 0.340	< 0.0025	< 0.0020	8.41	
	11/6/2025	0.39	120	220	0.45	6.97	170	1000	< 0.0030	< 0.0010	0.050	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.013	< 0.00020	0.0068	< 0.424	< 0.0025	< 0.0020	2.78	
MW-03 downgradient	10/28/2015	0.34	110	230	0.41	7.11	110	960	< 0.0030	0.0015	0.10	^< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.013	< 0.00020	< 0.0050	0.41	< 0.0025	< 0.0020	NA	
	2/10/2016	0.49	100	220	0.44	7.31	130	790	< 0.0030	0.0017	0.10	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.011	< 0.00020	0.0060	< 1.68	0.0045	< 0.0020	NA	
	5/10/2016	0.48	95	240	0.44	7.07	130	800	< 0.0030	0.0011	0.095	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.012	< 0.00020	0.0062	< 0.326	0.0030	< 0.0020	NA	
	8/31/2016	0.49	100	250	0.45	7.18	120	920	< 0.0030	0.0013	0.095	^< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.012	< 0.00020	0.0086	< 0.373	0.0051	< 0.0020	NA	
	11/2/2016	0.34	87	190	0																			

Table 1. Groundwater Analytical Results - Midwest Generation, LLC, Joliet Station #29, Joliet, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228	Selenium	Thallium	Turbidity	
MW-04 downgradient	10/28/2015	0.34	94	F1 200	0.45	7.07	83	740	< 0.0030	0.0013	0.082	^< 0.0010	< 0.00050	< 0.0050	0.0063	< 0.00050	0.013	< 0.00020	0.0065	0.741	< 0.0025	< 0.0020	NA	
	2/10/2016	0.32	97	210	0.47	7.22	140	810	< 0.0030	0.0018	0.088	< 0.0010	< 0.00050	< 0.0050	0.0074	0.00062	0.011	< 0.00020	0.0063	< 1.52	< 0.0025	< 0.0020	NA	
	5/10/2016	0.47	100	260	0.46	6.71	150	900	< 0.0030	0.0014	0.088	< 0.0010	< 0.00050	< 0.0050	0.0086	< 0.00050	0.012	< 0.00020	0.0088	< 0.365	< 0.0025	< 0.0020	NA	
	8/31/2016	0.42	100	210	0.45	7.07	120	890	< 0.0030	0.0014	0.086	^< 0.0010	< 0.00050	< 0.0050	0.0035	< 0.00050	0.011	< 0.00020	0.0083	0.432	< 0.0025	< 0.0020	NA	
	11/2/2016	0.32	98	160	0.43	7.25	83	750	< 0.0030	0.0025	0.079	< 0.0010	< 0.00050	< 0.0050	0.010	0.0012	0.012	< 0.00020	0.0070	< 0.463	< 0.0025	< 0.0020	NA	
	2/6/2017	0.40	110	200	0.37	7.19	98	790	< 0.0030	0.0015	0.100	< 0.0010	< 0.00050	< 0.0050	0.0160	< 0.00050	0.013	< 0.00020	0.0071	< 0.356	< 0.0025	< 0.0020	NA	
	4/26/2017	0.33	100	220	0.37	7.46	89	770	< 0.0030	0.0021	0.095	< 0.0010	< 0.00050	< 0.0050	0.0078	0.00055	0.012	< 0.00020	0.0069	< 0.35	< 0.0025	< 0.0020	NA	
	6/14/2017	0.37	92	190	0.47	7.45	80	770	< 0.0030	0.0013	0.078	< 0.0010	< 0.00050	< 0.0050	0.012	< 0.00050	0.013	< 0.00020	0.0085	< 0.309	< 0.0025	< 0.0020	NA	
	8/2/2017	0.35	93	180	0.43	7.41	100	770	< 0.0030	0.0013	0.077	< 0.0010	< 0.00050	0.040	0.0031	< 0.00050	0.012	< 0.00020	0.0091	< 0.282	0.0029	< 0.0020	NA	
	10/18/2017	0.54	97	140	0.45	7.20	120	790	< 0.0030	0.0019	0.082	^< 0.0010	< 0.00050	< 0.0050	0.0046	0.00077	0.015	< 0.00020	0.0071	0.423	0.0030	^< 0.0020	NA	
	4/24/2018	0.40	110	240	0.43	7.21	160	940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/31/2018 R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/17/2018	0.29	100	230	0.45	7.20	130	840	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/7/2019	0.76	120	340	0.42	7.27	120	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/3/2019 R	0.23	NA	250	NA	NA	NA	870	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/6/2019	0.30	77	140	0.41	7.33	53	670	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/20/2020	0.79	110	250	0.45	7.30	110	1100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/11/2020 R	0.28	NA	NA	NA	NA	NA	850	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/22/2020	0.33	100	190	0.48	7.15	83	770	< 0.0030	0.0015	0.089	^< 0.0010	< 0.00050	< 0.0050	0.0082	< 0.00050	0.013	< 0.00020	0.0061	NA	< 0.0025	< 0.0020	NA	
	5/18/2021	0.22	120	280	0.42	7.30	190	1100	< 0.0030	0.0019	0.12	< 0.0010	< 0.00050	< 0.0050	0.0037	< 0.00050	0.014	< 0.00020	< 0.0050	< 0.4450	< 0.0025	< 0.0020	2.52	
	6/29/2021 R	NA	NA	NA	NA	7.36	190	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.34
	8/30/2021	0.33	120	330	0.40	7.46	170	1000	^+< 0.0030	0.0016	0.12	< 0.0010	< 0.00050	< 0.0050	0.0034	< 0.00050	0.013	< 0.00020	0.0057	0.877	0.0030	< 0.0020	18.30	
	11/16/2021	0.30	130	290	0.42	7.11	140	1000	< 0.0030	0.0021	0.12	^+< 0.0010	< 0.00050	< 0.0050	0.0040	< 0.00050	0.011	< 0.00020	0.0059	0.892	< 0.0025	< 0.0020	4.20	
	3/3/2022	0.31	120	220	0.42	7.11	170	1300	< 0.0030	0.0018	0.12	< 0.0010	< 0.00050	< 0.0050	0.0029	< 0.00050	0.012	< 0.00020	0.0056	< 0.437	< 0.0025	< 0.0020	0.00	
	5/26/2022	0.26	110	290	0.44	6.94	150	1100	< 0.0030	0.0019	0.10	^+< 0.0010	< 0.00050	< 0.0050	0.0036	< 0.00050	< 0.010	< 0.00020	< 0.0050	0.624	< 0.0025	< 0.0020	1.23	
	8/31/2022	0.32	120	240	0.45	6.38	150	870	< 0.0030	0.0016	0.11	< 0.0010	< 0.00050	< 0.0050	0.0018	< 0.00050	0.012	< 0.00020	0.0055	0.804	< 0.0025	< 0.0020	3.78	
	11/9/2022	0.34	120	240	0.61	7.08	150	940	< 0.0030	0.0021	0.11	< 0.0010	< 0.00050	< 0.0050	0.0030	^+< 0.00050	0.012	< 0.00020	0.0056	0.666	< 0.0025	< 0.0020	43.50	
	2/28/2023	0.34	120	280	0.40	7.16	150	1100	< 0.0030	0.0019	0.10	< 0.0010	< 0.00050	< 0.0050	0.0078	< 0.00050	0.011	< 0.00020	0.0058	< 0.593	< 0.0025	< 0.0020	62.10	
	5/3/2023	0.28	110	290	0.40	6.97	160	1100	< 0.0030	0.0014	0.095	< 0.0010	< 0.00050	< 0.0050	0.0074	< 0.00050	0.011	< 0.00020	0.0051	< 0.488	< 0.0025	< 0.0020	6.30	
	7/20/2023	0.37	120	240	0.41	7.02	180	970	< 0.0030	0.0018	0.10	< 0.0010	< 0.00050	< 0.0050	0.0025	< 0.00050	0.012	< 0.00020	< 0.0050	< 0.601	0.0027	< 0.0020	6.00	
	10/26/2023	0.31	120	320	0.43	6.95	140	1100	< 0.0030	0.0016	0.094	< 0.0010	< 0.00050	< 0.0050	0.0063	< 0.00050	0.013	< 0.00020	0.0052	1.15	< 0.0025	< 0.0020	1.60	
	1/23/2024	0.42	99	200	0.38	6.93	150	970	^+< 0.0030	0.002	0.091	^+< 0.0010	< 0.00050	< 0.0050	0.0085	0.00051	0.018	< 0.00020	0.0056	< 0.649	< 0.0025	< 0.0020	80.10	
	5/22/2024	0.39	110	200	0.41	7.12	120	910	< 0.0030	0.0016	0.077	< 0.0010	< 0.00050	< 0.0050	0.0091	0.00054	0.013	< 0.00020	0.0056	0.586	< 0.0025	< 0.0020	24.27	
	7/30/2024	0.34	110	170	0.42	7.45	120	860	< 0.0030	0.0013	0.074	< 0.0010	< 0.00050	< 0.0050	0.0081	^+< 0.00050	0.013	< 0.00020	0.0057	< 0.471	< 0.0025	< 0.0020	5.04	
	10/29/2024	0.38	120	190	0.43	7.32	120	980	< 0.0030	0.0013	0.078	< 0.0010	< 0.00050	< 0.0050	0.0095	< 0.00050	0.013	< 0.00020	0.0055	< 0.197	< 0.0025	< 0.0020	5.30	
	1/29/2025	0.36	120	210	0.46	7.16	140	920	< 0.0030	0.0015	0.079	^+< 0.0010	< 0.00050	< 0.0050	0.013	< 0.00050	0.013	< 0.00020	0.0059	< 0.442	< 0.0025	< 0.0020	51.63	
	4/30/2025	0.35	130	290	0.39	7.27	160	1000	< 0.0030	0.0012	0.091	< 0.0010	< 0.00050	< 0.0050	0.0079	< 0.00050	0.012	< 0.00020	0.0050	0.927	< 0.0025	< 0.0020	4.03	
	8/7/2025	0.32	110	240	0.65	7.04	160	1100	< 0.0030	0.0011	0.084	< 0.0010	< 0.00050	< 0.0050	0.0026	< 0.00050	0.013	< 0.00020	< 0.0050	0.581	< 0.0025	< 0.0020	23.77	
	11/6/2025	0.33	120	250	0.49	7.01	170	970	< 0.0030	0.0012	0.090	< 0.0010	< 0.00050	< 0.0050	0.0046	< 0.00050	0.014	< 0.00020	0.0062	< 0.679	< 0.0025	< 0.0020	3.22	
	MW-05 downgradient	10/28/2015	0.64	100	160	0.39	7.12	120	790	< 0.0030	0.0011	0.057	^< 0.0010	< 0.00050	< 0.0050	0.0013	< 0.00050	0.018	< 0.00020	0.0088	0.6231	< 0.0025	< 0.0020	NA
		2/10/2016	0.46	110	220	0.39	7.25	120	790	< 0.0030	0.0028	0.071	< 0.0010	< 0.00050	0.0062	0.0013	0.0022	< 0.020	< 0.00020	F1 0.0053	1.09	< 0.0025	< 0.0020	NA
		5/10/2016	0.80	150	220	0.46	6.88	290	950	< 0.0030	0.0023	0.075	< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.0022	0.014	< 0.00020	0.008	< 0.40	0.019	< 0.0020	NA
		8/31/2016	1.0	140	99	0.56	6.81	260	820	< 0.0030	< 0.0010	0.070	^< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	< 0.010	< 0.00020	0.012	< 0.42	0.020	< 0.0020	NA
		11/2/2016	0.41	98	130	0.37	7.26	100	700	< 0.0030	0.0022	0.056	< 0.0010	< 0.00050	0.0051	< 0.0010	0.0017	0.015	< 0.00020	0.0061	0.438	< 0.0025	< 0.0020	NA
		2/6/2017	0.48	150	180	0.30	7.22	120	790	< 0.0030	0.0016	0.082												

Table 2. Proposed Site-Specific Groundwater Protection Standards - Joliet #29

Upgradient Well(s)	Parameter	Section 845.600 Standards	Interwell Background Prediction Limit	Proposed GWPS
MW-10	Antimony	0.006	0.003	<b>0.006</b>
MW-10	Arsenic	0.01	0.002	<b>0.01</b>
MW-10	Barium	2.0	0.063	<b>2.0</b>
MW-10	Beryllium	0.004	0.001	<b>0.004</b>
MW-10	Boron	2.0	0.831	<b>2.0</b>
MW-10	Cadmium	0.005	0.005	<b>0.005</b>
MW-10*	Chloride*	200	368	<b>368</b>
MW-10	Chromium	0.1	0.005	<b>0.1</b>
MW-10	Cobalt	0.006	0.001	<b>0.006</b>
MW-10	Combined Radium 226 + 228 (pCi/L)	5.0	0.626	<b>5.0</b>
MW-10	Fluoride	4.0	0.486	<b>4.0</b>
MW-10	Lead	0.0075	0.0014	<b>0.0075</b>
MW-10	Lithium	0.04	0.019	<b>0.040</b>
MW-10	Mercury	0.002	0.0002	<b>0.002</b>
MW-10	Molybdenum	0.10	0.009	<b>0.10</b>
MW-10	pH (standard units)	6.5-9.0	6.733-7.569	<b>6.5-9.0</b>
MW-10	Selenium	0.05	0.003	<b>0.050</b>
MW-10	Sulfate	400	214.7	<b>400</b>
MW-10	Thallium	0.002	0.002	<b>0.002</b>
MW-10*	Total Dissolved Solids*	1200	1031	<b>1200</b>
MW-10*	Calcium*	NE	143.0	<b>143.0</b>
MW-10	Turbidity	NE	31.22	<b>31.22</b>

All values are in mg/L (ppm) unless otherwise noted.

\* - Limited to original 8 background samples.

NE - Not Established

**Bold** - Proposed Site-specific Groundwater Protection Standard based on Section 845.600(a)(2)

Table 3. Groundwater Elevations - Midwest Generation, LLC, Joliet Station #29, Joliet, IL

Well ID	Date	Top of Casing Elevation (ft above MSL)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft above MSL)
MW-03	10/27/15	538.78	33.87	504.91
	02/09/16	538.79	33.17	505.62
	05/10/16	538.79	32.82	505.97
	08/30/16	538.79	31.88	506.91
	11/01/16	538.79	32.88	505.91
	02/06/17	538.79	33.25	505.54
	04/25/17	538.79	33.06	505.73
	06/14/17	538.79	33.74	505.05
	08/01/17	538.79	32.36	506.43
	10/18/17	538.79	30.03	508.76
	04/24/18	538.79	32.83	505.96
	10/16/18	538.79	32.58	506.21
	05/06/19	538.79	29.59	509.20
	11/06/19	538.79	33.38	505.41
	05/20/20	538.79	27.13	511.66
	10/21/20	538.79	33.52	505.27
	05/17/21	538.79	33.05	505.74
	06/11/21	538.79	33.64	505.15
	07/19/21	538.79	33.28	505.51
	08/09/21	538.79	33.85	504.94
	11/15/21	538.79	33.19	505.60
	01/19/22	538.79	33.38	505.41
	02/16/22	538.79	33.17	505.62
	03/03/22	538.79	32.92	505.87
	04/05/22	538.79	31.76	507.03
	05/23/22	538.79	33.03	505.76
	06/30/22	538.79	33.47	505.32
	07/19/22	538.79	33.62	505.17
	08/30/22	538.79	33.58	505.21
	09/20/22	538.79	33.56	505.23
	10/13/22	538.79	33.40	505.39
	11/08/22	538.79	33.37	505.42
	12/20/22	538.79	33.05	505.74
	01/26/23	538.79	33.15	505.64
	02/21/23	538.79	32.45	506.34
	03/15/23	538.79	32.78	506.01
	04/20/23	538.79	33.28	505.51
	05/02/23	538.79	33.19	505.60
	06/08/23	538.79	33.45	505.34
	07/19/23	538.79	33.35	505.44
	08/29/23	538.79	33.66	505.13
	09/21/23	538.79	32.61	506.18
	10/25/23	538.79	33.12	505.67
	11/14/23	538.79	33.29	505.50
	12/07/23	538.79	32.96	505.83
	01/23/24	538.79	32.85	505.94
	02/20/24	538.79	33.11	505.68
	03/13/24	538.79	32.65	506.14
04/19/24	538.79	32.99	505.80	
05/21/24	538.79	32.49	506.30	
06/19/24	538.79	33.20	505.59	
07/29/24	538.79	33.09	505.70	
08/22/24	538.79	33.44	505.35	
09/23/24	538.79	33.44	505.35	
10/28/24	538.79	33.41	505.38	
11/07/24	538.79	33.17	505.62	
12/17/24	538.79	33.37	505.42	
01/27/25	538.79	33.38	505.41	
02/10/25	538.79	33.39	505.40	
03/10/25	538.79	32.99	505.80	
04/29/25	538.79	33.05	505.74	
05/16/25	538.79	33.27	505.52	
06/25/25	538.79	33.18	505.61	
07/18/25	538.79	33.36	505.43	
08/07/25	538.79	33.28	505.51	
09/15/25	538.79	33.42	505.37	
10/23/25	538.79	33.44	505.35	
11/05/25	538.79	33.46	505.33	
12/17/25	538.79	33.28	505.51	

Notes:  
MSL - Mean Sea Level  
TOC - Top of Casing

Table 3. Groundwater Elevations - Midwest Generation, LLC, Joliet Station #29, Joliet, IL

Well ID	Date	Top of Casing Elevation (ft above MSL)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft above MSL)
MW-04	10/27/15	539.03	34.05	504.98
	02/09/16	539.01	33.42	505.59
	05/10/16	539.01	33.07	505.94
	08/30/16	539.01	32.08	506.93
	11/01/16	539.01	33.16	505.85
	02/06/17	539.01	33.51	505.50
	04/25/17	539.01	33.29	505.72
	06/14/17	539.01	33.99	505.02
	08/01/17	539.01	32.09	506.92
	10/18/17	539.01	30.28	508.73
	04/24/18	539.01	33.10	505.91
	10/16/18	539.01	32.85	506.16
	05/06/19	539.01	29.83	509.18
	11/06/19	539.01	31.65	507.36
	05/20/20	539.01	27.40	511.61
	10/21/20	539.01	33.48	505.53
	05/17/21	539.01	33.32	505.69
	06/11/21	539.01	33.91	505.10
	07/19/21	539.01	33.55	505.46
	08/09/21	539.01	34.14	504.87
	11/15/21	539.01	33.44	505.57
	01/19/22	539.01	33.66	505.35
	02/16/22	539.01	33.44	505.57
	03/03/22	539.01	33.17	505.84
	04/05/22	539.01	32.05	506.96
	05/23/22	539.01	33.28	505.73
	06/30/22	539.01	33.72	505.29
	07/19/22	539.01	33.87	505.14
	08/30/22	539.01	33.83	505.18
	09/20/22	539.01	33.82	505.19
	10/13/22	539.01	33.67	505.34
	11/08/22	539.01	33.64	505.37
	12/20/22	539.01	33.34	505.67
	01/26/23	539.01	33.38	505.63
	02/21/23	539.01	32.70	506.31
	03/15/23	539.01	33.07	505.94
	04/20/23	539.01	33.55	505.46
	05/02/23	539.01	33.44	505.57
	06/08/23	539.01	33.71	505.30
	07/19/23	539.01	33.66	505.35
	08/29/23	539.01	33.92	505.09
	09/21/23	539.01	32.89	506.12
	10/25/23	539.01	33.39	505.62
	11/14/23	539.01	33.58	505.43
	12/07/23	539.01	33.24	505.77
01/23/24	539.01	33.14	505.87	
02/20/24	539.01	33.38	505.63	
03/13/24	539.01	32.94	506.07	
04/19/24	539.01	33.24	505.77	
05/21/24	539.01	32.76	506.25	
06/19/24	539.01	33.46	505.55	
07/29/24	539.01	33.34	505.67	
08/22/24	539.01	33.72	505.29	
09/23/24	539.01	33.71	505.30	
10/28/24	539.01	33.67	505.34	
11/07/24	539.01	33.44	505.57	
12/17/24	539.01	33.65	505.36	
01/27/25	539.01	33.69	505.32	
02/10/25	539.01	33.68	505.33	
03/10/25	539.01	33.30	505.71	
04/29/25	539.01	33.33	505.68	
05/16/25	539.01	33.57	505.44	
06/25/25	539.01	33.46	505.55	
07/18/25	539.01	33.64	505.37	
08/07/25	539.01	33.59	505.42	
09/15/25	539.01	33.71	505.30	
10/23/25	539.01	33.72	505.29	
11/05/25	539.01	33.74	505.27	
12/17/25	539.01	33.59	505.42	

Notes:  
MSL - Mean Sea Level  
TOC - Top of Casing

Table 3. Groundwater Elevations - Midwest Generation, LLC, Joliet Station #29, Joliet, IL

Well ID	Date	Top of Casing Elevation (ft above MSL)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft above MSL)
MW-05	10/27/15	539.69	34.91	504.78
	02/09/16	539.64	34.18	505.46
	05/10/16	539.64	33.81	505.83
	08/30/16	539.64	32.82	506.82
	11/01/16	539.64	33.90	505.74
	02/06/17	539.64	34.23	505.41
	04/25/17	539.64	34.04	505.60
	06/14/17	539.64	34.74	504.90
	08/01/17	539.64	33.12	506.52
	10/18/17	539.64	31.03	508.61
	04/24/18	539.64	33.79	505.85
	10/16/18	539.64	33.61	506.03
	05/06/19	539.64	30.55	509.09
	11/06/19	539.64	32.40	507.24
	05/20/20	539.64	28.16	511.48
	10/21/20	539.64	34.52	505.12
	05/17/21	539.64	34.05	505.59
	06/11/21	539.64	34.66	504.98
	07/19/21	539.64	34.27	505.37
	08/09/21	539.64	34.78	504.86
	11/15/21	539.64	34.18	505.46
	01/19/22	539.64	34.37	505.27
	02/16/22	539.64	34.15	505.49
	03/03/22	539.64	33.93	505.71
	04/05/22	539.64	32.82	506.82
	05/23/22	539.64	34.00	505.64
	06/30/22	539.64	34.45	505.19
	07/19/22	539.64	34.64	505.00
	08/30/22	539.26	34.58	504.68
	09/20/22	539.26	34.58	504.68
	10/13/22	539.26	34.39	504.87
	11/08/22	539.26	34.38	504.88
	12/20/22	539.26	34.05	505.21
	01/26/23	539.26	34.08	505.18
	02/21/23	539.26	33.40	505.86
	03/15/23	539.26	33.79	505.47
	04/20/23	539.26	34.28	504.98
	05/02/23	539.26	34.17	505.09
	06/08/23	539.26	34.45	504.81
	07/19/23	539.26	34.38	504.88
	08/29/23	539.26	34.62	504.64
	09/21/23	539.26	33.60	505.66
	10/25/23	539.26	34.10	505.16
	11/14/23	539.26	34.28	504.98
	12/07/23	539.26	33.93	505.33
01/23/24	539.26	33.79	505.47	
02/20/24	539.26	34.08	505.18	
03/13/24	539.26	33.63	505.63	
04/19/24	539.26	33.95	505.31	
05/21/24	539.26	33.45	505.81	
06/19/24	539.26	34.17	505.09	
07/29/24	539.26	34.05	505.21	
08/22/24	539.26	34.43	504.83	
09/23/24	539.26	34.42	504.84	
10/28/24	539.26	34.39	504.87	
11/07/24	539.26	34.16	505.10	
12/17/24	539.26	34.36	504.90	
01/27/25	539.26	34.34	504.92	
02/10/25	539.26	34.37	504.89	
03/10/25	539.26	33.98	505.28	
04/29/25	539.26	34.03	505.23	
05/16/25	539.26	34.25	505.01	
06/25/25	539.26	34.18	505.08	
07/18/25	539.26	34.37	504.89	
08/07/25	539.26	34.29	504.97	
09/15/25	539.26	34.41	504.85	
10/23/25	539.26	34.43	504.83	
11/05/25	539.26	34.45	504.81	
12/17/25	539.26	34.24	505.02	

Notes:

MSL - Mean Sea Level  
TOC - Top of Casing

Table 3. Groundwater Elevations - Midwest Generation, LLC, Joliet Station #29, Joliet, IL

Well ID	Date	Top of Casing Elevation (ft above MSL)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft above MSL)
MW-10	10/27/15	540.03	35.10	504.93
	02/09/16	540.02	34.32	505.70
	05/10/16	540.02	34.02	506.00
	08/30/16	540.02	32.97	507.05
	11/01/16	540.02	34.04	505.98
	02/06/17	540.02	34.42	505.60
	04/25/17	540.02	34.22	505.80
	06/14/17	540.02	34.91	505.11
	08/01/17	540.02	33.18	506.84
	10/18/17	540.02	31.13	508.89
	04/24/18	540.02	33.97	506.05
	10/16/18	540.02	33.73	506.29
	05/06/19	540.02	30.58	509.44
	11/06/19	540.02	32.42	507.60
	05/20/20	540.02	28.09	511.93
	10/21/20	540.02	34.72	505.30
	05/17/21	540.02	34.23	505.79
	06/11/21	540.02	34.81	505.21
	07/19/21	540.02	34.45	505.57
	08/09/21	540.02	35.05	504.97
	11/15/21	540.02	34.38	505.64
	01/19/22	540.02	34.59	505.43
	02/16/22	540.02	34.38	505.64
	03/03/22	540.02	34.10	505.92
	04/05/22	540.02	32.89	507.13
	05/23/22	540.02	34.20	505.82
	06/30/22	540.02	34.68	505.34
	07/19/22	540.02	34.80	505.22
	08/30/22	540.02	34.76	505.26
	09/20/22	540.02	34.74	505.28
	10/13/22	540.02	34.61	505.41
	11/08/22	540.02	34.56	505.46
	12/20/22	540.02	34.22	505.80
	01/26/23	540.02	34.32	505.70
	02/21/23	540.02	33.61	506.41
	03/15/23	540.02	33.96	506.06
	04/20/23	540.02	34.45	505.57
	05/02/23	540.02	34.36	505.66
	06/08/23	540.02	34.64	505.38
	07/19/23	540.02	34.53	505.49
	08/29/23	540.02	34.85	505.17
	09/21/23	540.02	33.79	506.23
	10/25/23	540.02	34.30	505.72
	11/14/23	540.02	34.49	505.53
	12/07/23	540.02	34.14	505.88
01/23/24	540.02	34.02	506.00	
02/20/24	540.02	34.29	505.73	
03/13/24	540.02	33.79	506.23	
04/19/24	540.02	34.14	505.88	
05/21/24	540.02	33.60	506.42	
06/19/24	540.02	34.39	505.63	
07/29/24	540.02	34.25	505.77	
08/22/24	540.02	34.63	505.39	
09/23/24	540.02	34.64	505.38	
10/28/24	540.02	34.60	505.42	
11/07/24	540.02	34.38	505.64	
12/17/24	540.02	34.57	505.45	
01/27/25	540.02	34.56	505.46	
02/10/25	540.02	34.58	505.44	
03/10/25	540.02	34.15	505.87	
04/29/25	540.02	34.23	505.79	
05/16/25	540.02	34.47	505.55	
06/25/25	540.02	34.39	505.63	
07/18/25	540.02	34.58	505.44	
08/07/25	540.02	34.47	505.55	
09/15/25	540.02	34.63	505.39	
10/23/25	540.02	34.63	505.39	
11/05/25	540.02	34.69	505.33	
12/17/25	540.02	34.49	505.53	

Notes:

MSL - Mean Sea Level  
TOC - Top of Casing

Table 4. Groundwater Flow Direction and Estimated Seepage Velocity/Flow Rate - Joliet #29 Generation Station.

DATE	Groundwater Flow Direction	Kavg (ft/sec)*	Average Hydraulic Gradient (ft/ft)	Porosity (unitless)**	Estimated Seepage Velocity (ft/day)
1/27/2025	Southerly (SSW-SSE)	1.968E-03	0.0006	0.35	0.29
2/10/2025	Southerly (SSW-SSE)	1.968E-03	0.0007	0.35	0.33
3/10/2025	Southerly (SSW-SSE)	1.968E-03	0.0013	0.35	0.62
4/29/2025	Southerly (SSW-SSE)	1.968E-03	0.0014	0.35	0.66
5/16/2025	Southerly (SSW-SSE)	1.968E-03	0.0014	0.35	0.70
6/25/2025	Southerly (SSW-SSE)	1.968E-03	0.0023	0.35	1.10
7/18/2025	Southerly (SSW-SSE)	1.968E-03	0.0015	0.35	0.71
8/7/2025	Southerly (SSW-SSE)	1.968E-03	0.0010	0.35	0.50
9/15/2025	Southerly (SSW-SSE)	1.968E-03	0.0004	0.35	0.20
10/23/2025	Southerly (SSW-SSE)	1.968E-03	0.0004	0.35	0.20
11/5/2025	Southerly (SSW-SSE)	1.968E-03	0.0006	0.35	0.29
12/17/2025	Southerly (SSW-SSE)	1.968E-03	0.0006	0.35	0.30

\* Kavg - K values from re-evaluation of slug test data as part of groundwater modeling in support of Application for Construction Permit per Illinois State CCR Rule.

\*\* - Porosity estimate from Applied Hydrogeology, Fetter, 1980.

SSW - South-southwest

SSE - South-southeast

Table 5. CCR Groundwater Sample Collection Summary for 2025 - Joliet #29 Generating Station

Well ID	Number of Groundwater Sampling Events	Dates of Groundwater Sampling Events
MW-10 (Upgradient)	4	1/29/2025
		4/30/2025
		8/7/2025
		11/6/2025
MW-03 (Downgradient)	4	1/29/2025
		4/30/2025
		8/7/2025
		11/6/2025
MW-04 (Downgradient)	4	1/29/2025
		4/30/2025
		8/7/2025
		11/6/2025
MW-05 (Downgradient)	4	1/29/2025
		4/30/2025
		8/7/2025
		11/6/2025

**FIGURE**

NOTE:  
BACKGROUND MAP RETRIEVED FROM GOOGLE MAPS 2013



W:\projects\midwest\generation\atomer\client\enr\lel\gwg\evaluations\joliet\#29\map.dwg

ENVIRONMENTAL CONSULTATION & REMEDIATION

**K P R G**

KPRG and Associates, inc.

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

14665 West Lisbon Road, Suite 2B Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

CCR MONITORING WELLS SITE MAP

JOLIET #29 GENERATING STATION  
JOLIET, ILLINOIS

Scale: 1" = 100'

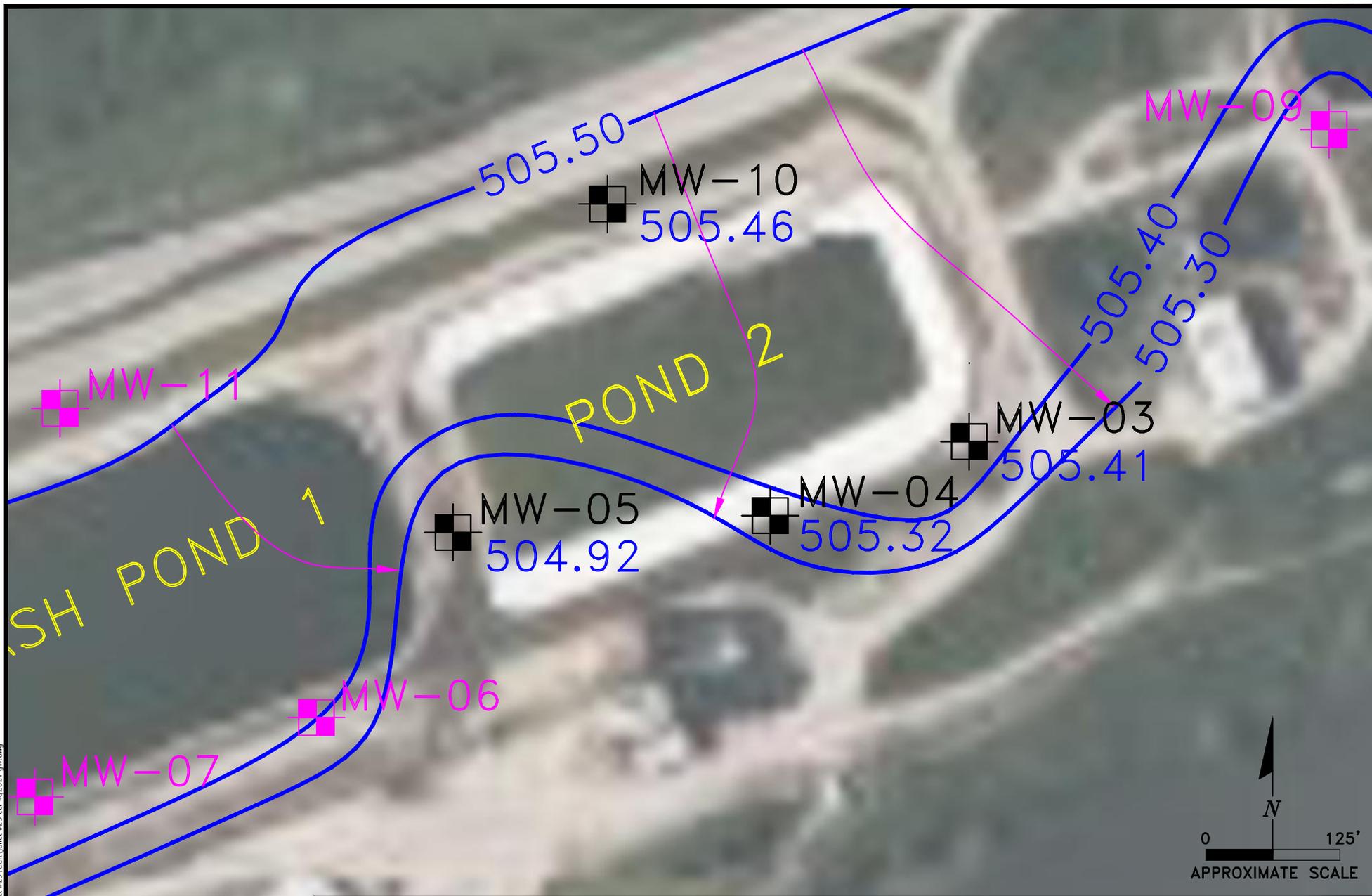
Date: December 27, 2017

KPRG Project No. 12313.0

FIGURE 1

0 100'  
APPROXIMATE SCALE

**ATTACHMENT 1**  
**Monthly Potentiometric Maps**



W:\projects\midwest\generation1\2313\figures\joliet #29\CCR\joliet #29\_ccr\_4q2021\_gw.dwg

**LEGEND:**

- 505 GROUNDWATER CONTOUR LINE
- - - 505 INFERRED GROUNDWATER CONTOUR LINE
- GROUNDWATER FLOW LINE
- MW-05 CCR MONITORING WELL
- MW-06 NON-CCR MONITORING WELL

**NOTE: AERIAL (MICROSOFT, 2025)**

ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R G

KPRG and Associates, inc.

---

14665 West Lisbon Road, Suite 1A Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

---

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

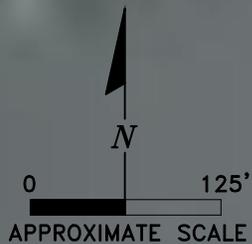
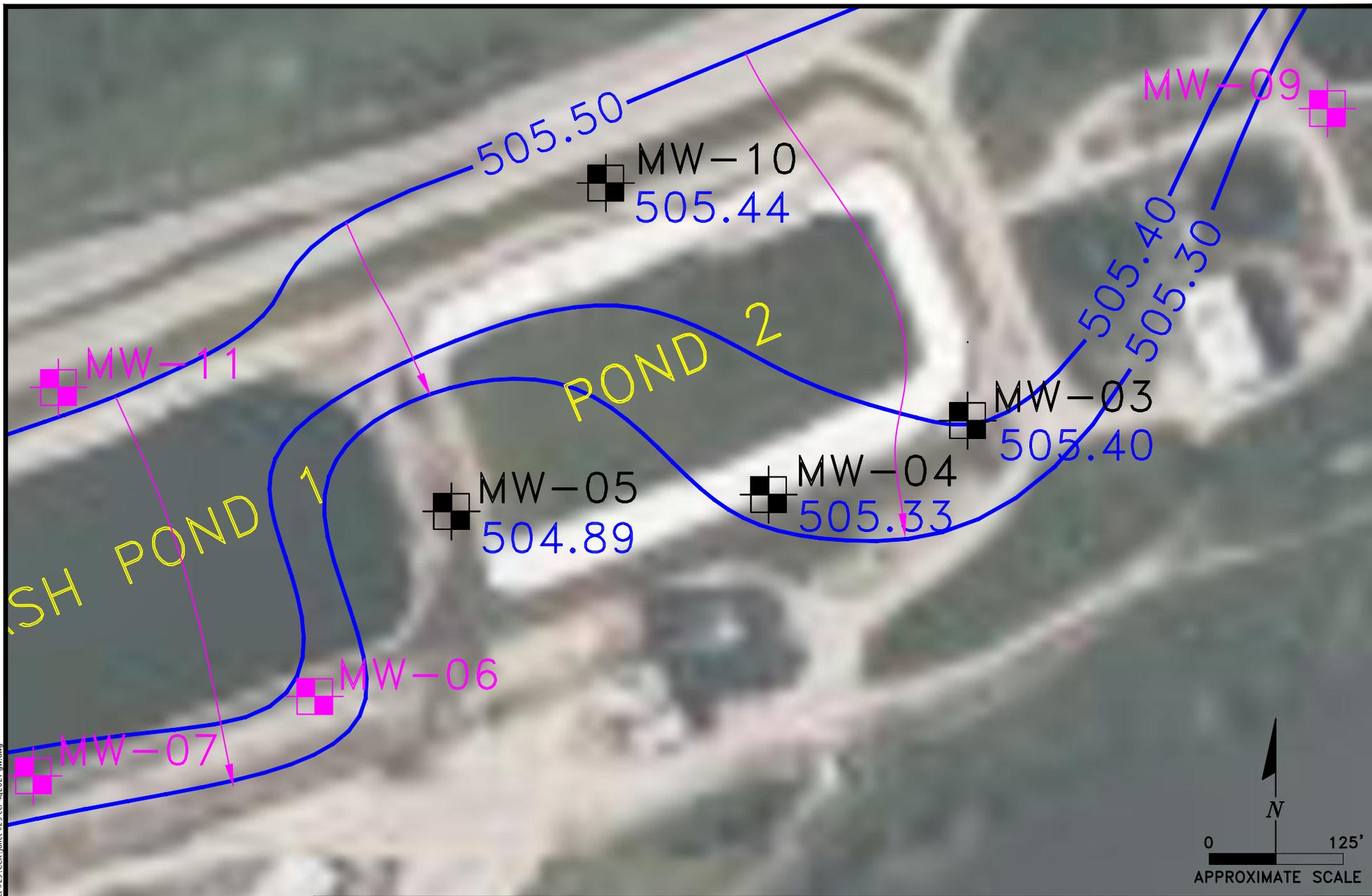
POTENTIOMETRIC MAP 01/2025

---

JOLIET #29 GENERATING STATION  
JOLIET, ILLINOIS

---

Scale: 1" = 125'	Date: January 7, 2026
KPRG Project No. 12313.0	ATTACHMENT 1



W:\projects\midwest\generation1\2313\figures\joliet\#29\CCR\joliet\#29\_ccr\_4q2021.gw.dwg

**LEGEND:**

	505 GROUNDWATER CONTOUR LINE
	505 INFERRED GROUNDWATER CONTOUR LINE
	GROUNDWATER FLOW LINE
	MW-05 CCR MONITORING WELL
	MW-06 NON-CCR MONITORING WELL

**NOTE: AERIAL (MICROSOFT, 2025)**

ENVIRONMENTAL CONSULTATION & REMEDIATION

# K P R G

KPRG and Associates, inc.

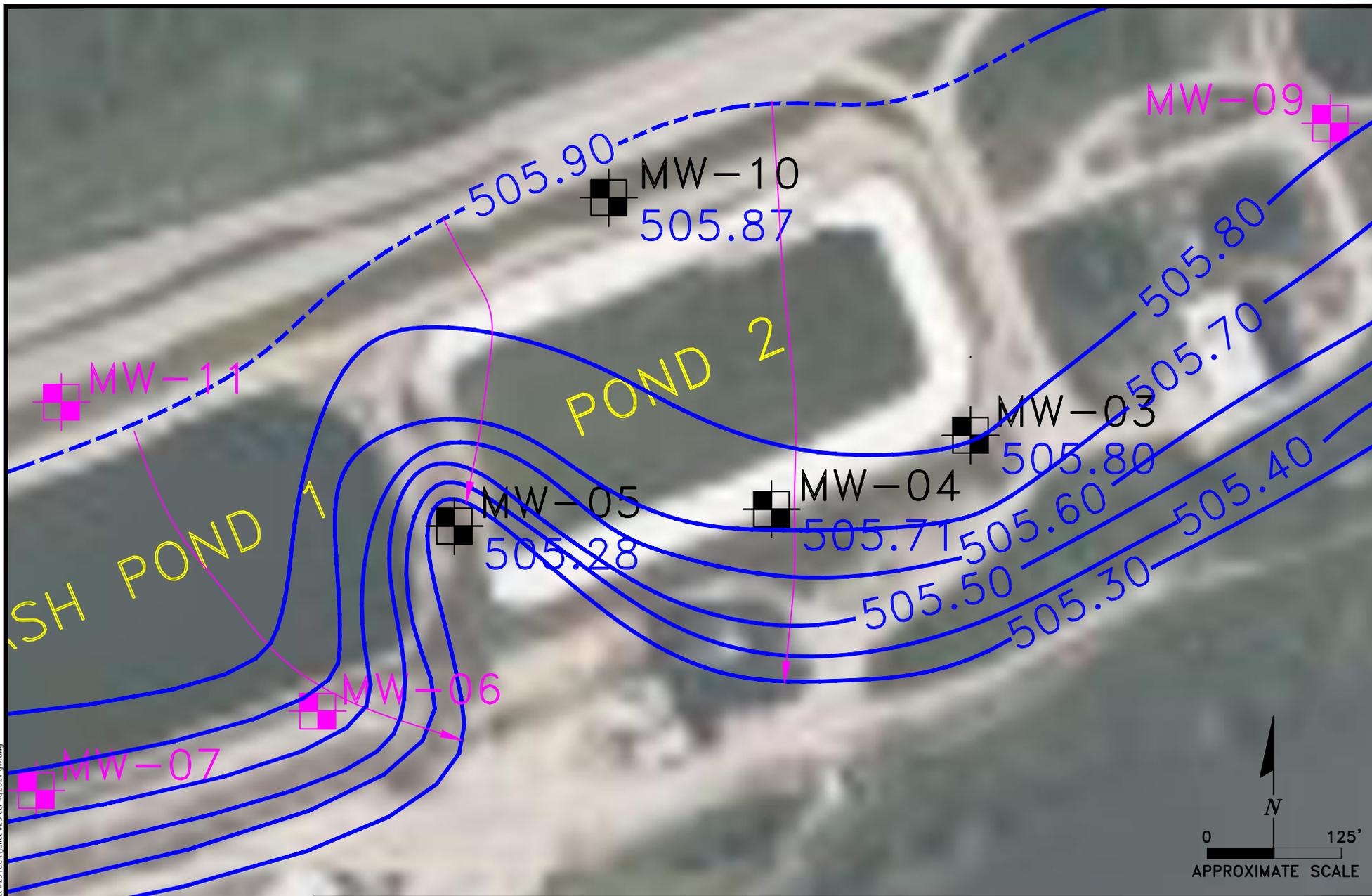
---

14665 West Lisbon Road, Suite 1A Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

---

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

POTENTIOMETRIC MAP 02/2025	
JOLIET #29 GENERATING STATION JOLIET, ILLINOIS	
Scale: 1" = 125'	Date: January 7, 2026
KPRG Project No. 12313.0	ATTACHMENT 1



W:\projects\midwest\generation1\2313\figures\joliet #29\CCR\joliet #29\_ccr\_4q2021.gw.dwg

**LEGEND:**

	505 GROUNDWATER CONTOUR LINE
	505 INFERRED GROUNDWATER CONTOUR LINE
	GROUNDWATER FLOW LINE
	MW-05 CCR MONITORING WELL
	MW-06 NON-CCR MONITORING WELL

**NOTE: AERIAL (MICROSOFT, 2025)**

ENVIRONMENTAL CONSULTATION & REMEDIATION

# K P R G

KPRG and Associates, inc.

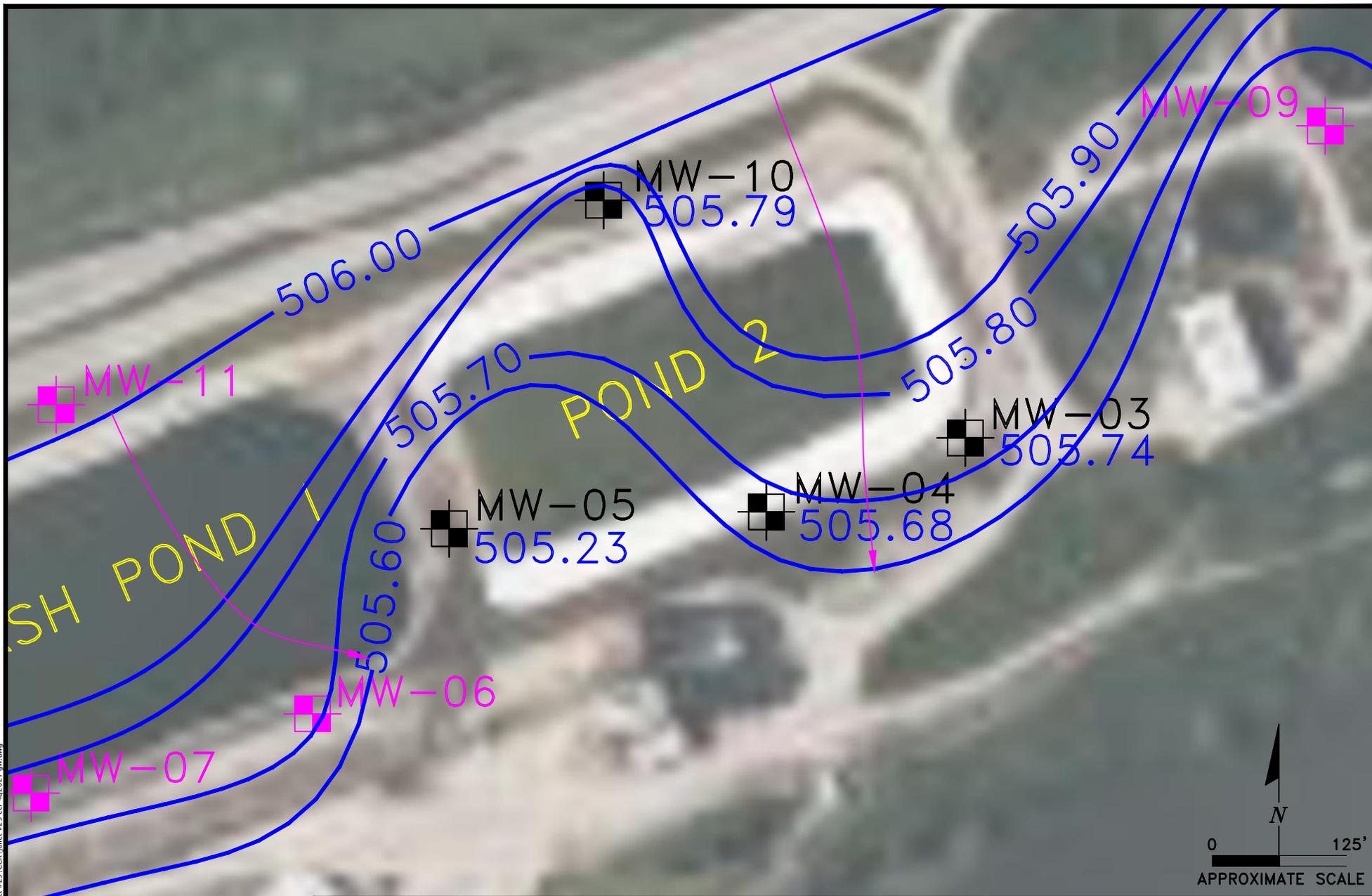
---

14665 West Lisbon Road, Suite 1A Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

---

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

<b>POTENTIOMETRIC MAP 03/2025</b>	
<b>JOLIET #29 GENERATING STATION JOLIET, ILLINOIS</b>	
<b>Scale: 1" = 125'</b>	<b>Date: January 7, 2026</b>
<b>KPRG Project No. 12313.0</b>	<b>ATTACHMENT 1</b>



W:\projects\midwest\generation1\2313\figures\joliel #29\CCR\joliel #29\_cdr\_4q2021.gw.dwg

**LEGEND:**

	505 GROUNDWATER CONTOUR LINE
	505 INFERRED GROUNDWATER CONTOUR LINE
	GROUNDWATER FLOW LINE
	MW-05 CCR MONITORING WELL
	MW-06 NON-CCR MONITORING WELL

**NOTE: AERIAL (MICROSOFT, 2025)**

ENVIRONMENTAL CONSULTATION & REMEDIATION

# K P R G

KPRG and Associates, inc.

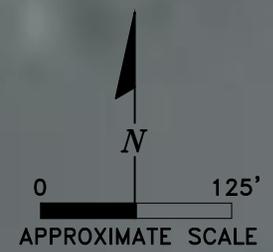
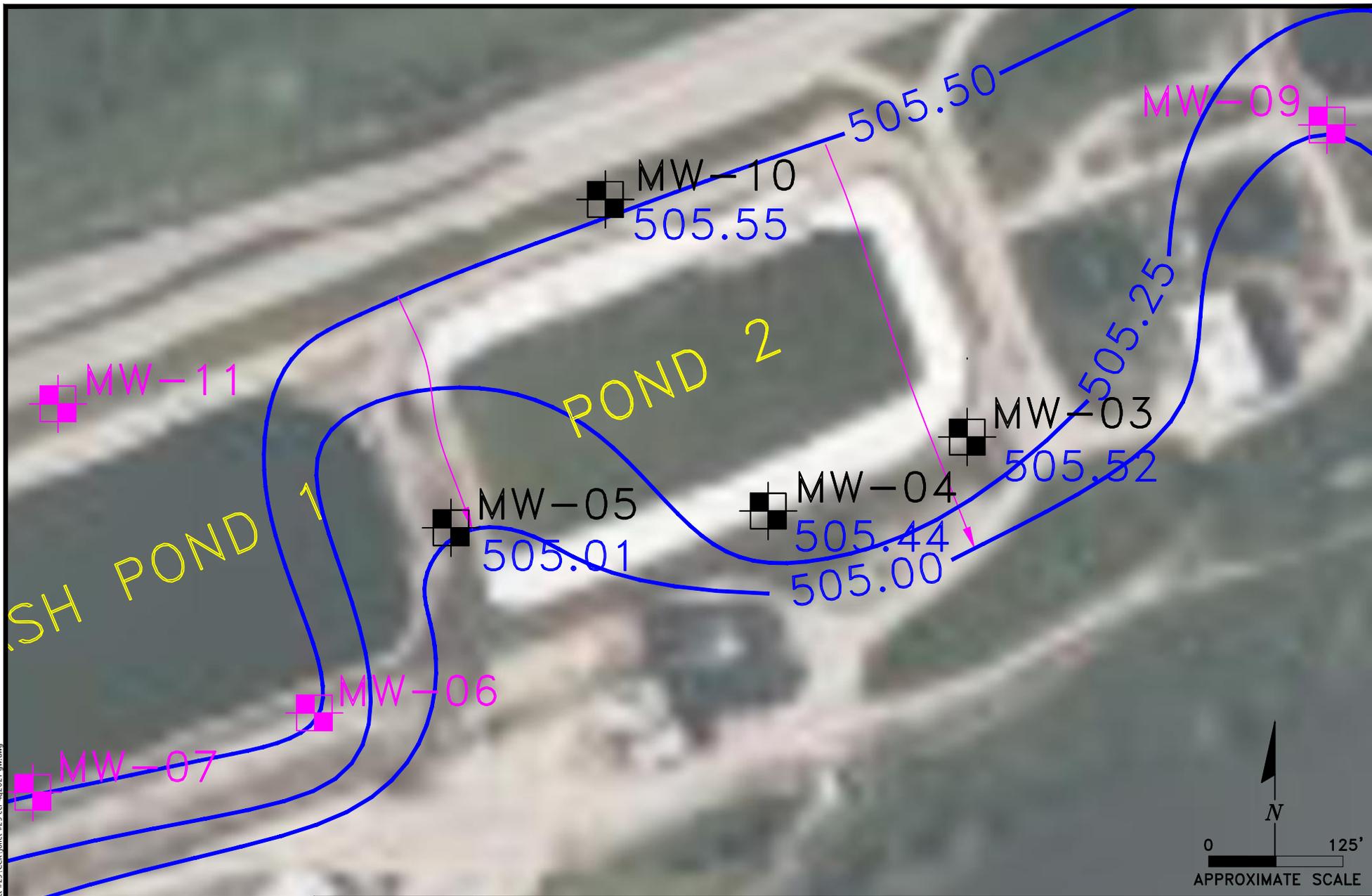
---

14665 West Lisbon Road, Suite 1A Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

---

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

POTENTIOMETRIC MAP 04/2025	
JOLIET #29 GENERATING STATION JOLIET, ILLINOIS	
Scale: 1" = 125'	Date: January 7, 2026
KPRG Project No. 12313.0	ATTACHMENT 1



W:\projects\midwest\generation\12313\figures\joliet\#29\CCR\joliet\#29\_ccr\_4q2021.gw.dwg

**LEGEND:**  
 — 505 GROUNDWATER CONTOUR LINE  
 - - - 505 INFERRED GROUNDWATER CONTOUR LINE  
 ← GROUNDWATER FLOW LINE  
 MW-05 CCR MONITORING WELL  
 MW-06 NON-CCR MONITORING WELL  
 NOTE: AERIAL (MICROSOFT, 2025)

ENVIRONMENTAL CONSULTATION & REMEDIATION

**K P R G** KPRG and Associates, inc.

14665 West Lisbon Road, Suite 1A Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

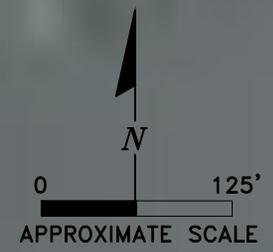
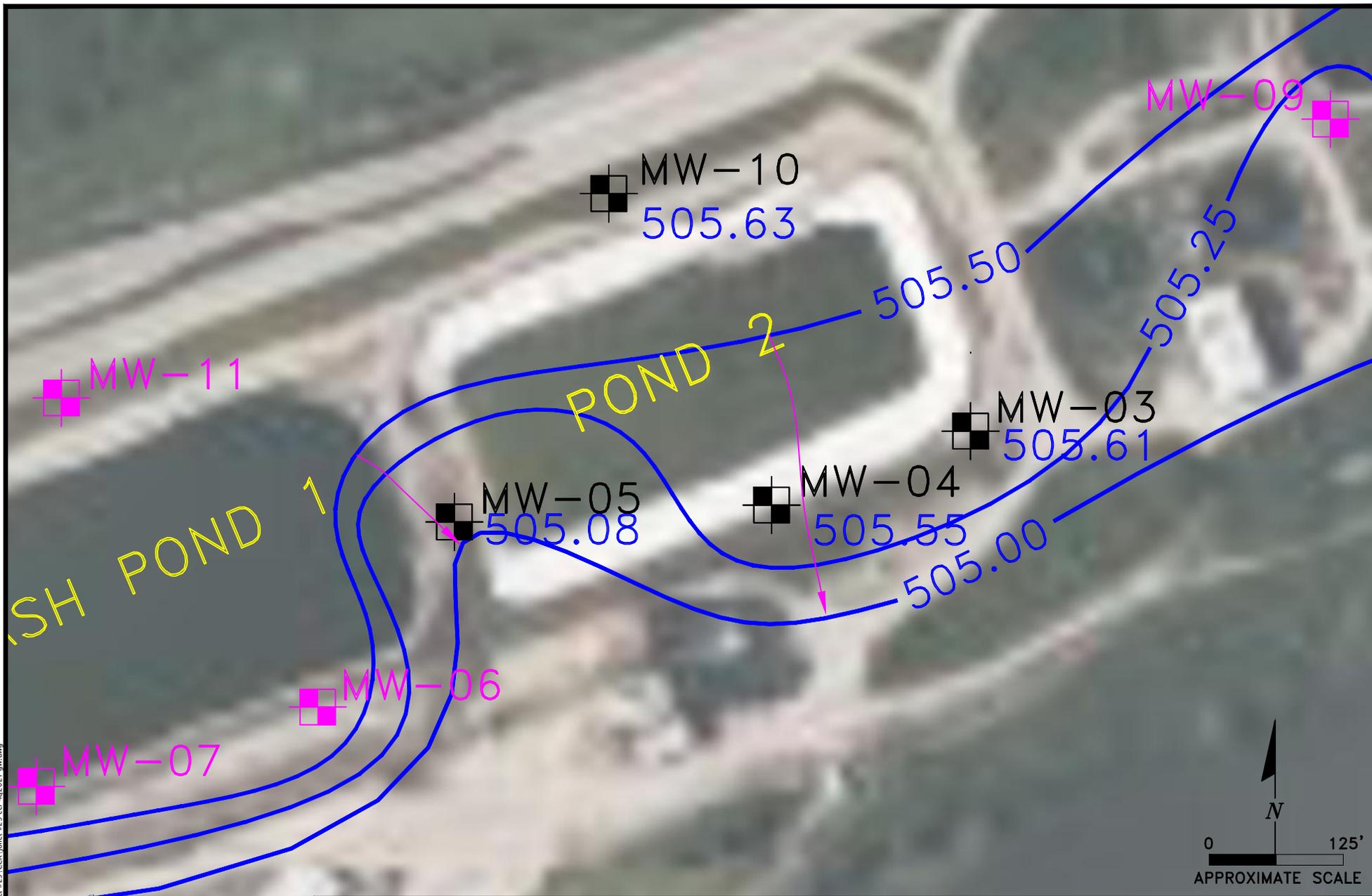
414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

POTENTIOMETRIC MAP 05/2025

JOLIET #29 GENERATING STATION  
 JOLIET, ILLINOIS

Scale: 1" = 125' | Date: January 7, 2026

KPRG Project No. 12313.0 | ATTACHMENT 1



**LEGEND:**  
 — 505 GROUNDWATER CONTOUR LINE  
 - - - 505 INFERRED GROUNDWATER CONTOUR LINE  
 ← GROUNDWATER FLOW LINE  
 MW-05 CCR MONITORING WELL  
 MW-06 NON-CCR MONITORING WELL  
**NOTE: AERIAL (MICROSOFT, 2025)**

ENVIRONMENTAL CONSULTATION & REMEDIATION

**K P R G** KPRG and Associates, inc.

14665 West Lisbon Road, Suite 1A Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

POTENTIOMETRIC MAP 06/2025

JOLIET #29 GENERATING STATION  
 JOLIET, ILLINOIS

Scale: 1" = 125' | Date: January 7, 2026

KPRG Project No. 12313.0 | ATTACHMENT 1

W:\projects\midwest\generation\12313\figures\joliet\#29\CCR\joliet\#29\_ccr\_4q2021\_gw.dwg



W:\projects\midwest\generation\12313\figures\joliet\#29\CCR\joliet\#29\_ccr\_4q2021\_gw.dwg

**LEGEND:**

	505 GROUNDWATER CONTOUR LINE
	505 INFERRED GROUNDWATER CONTOUR LINE
	GROUNDWATER FLOW LINE
	MW-05 CCR MONITORING WELL
	MW-06 NON-CCR MONITORING WELL

**NOTE: AERIAL (MICROSOFT, 2025)**

ENVIRONMENTAL CONSULTATION & REMEDIATION

# K P R G

KPRG and Associates, inc.

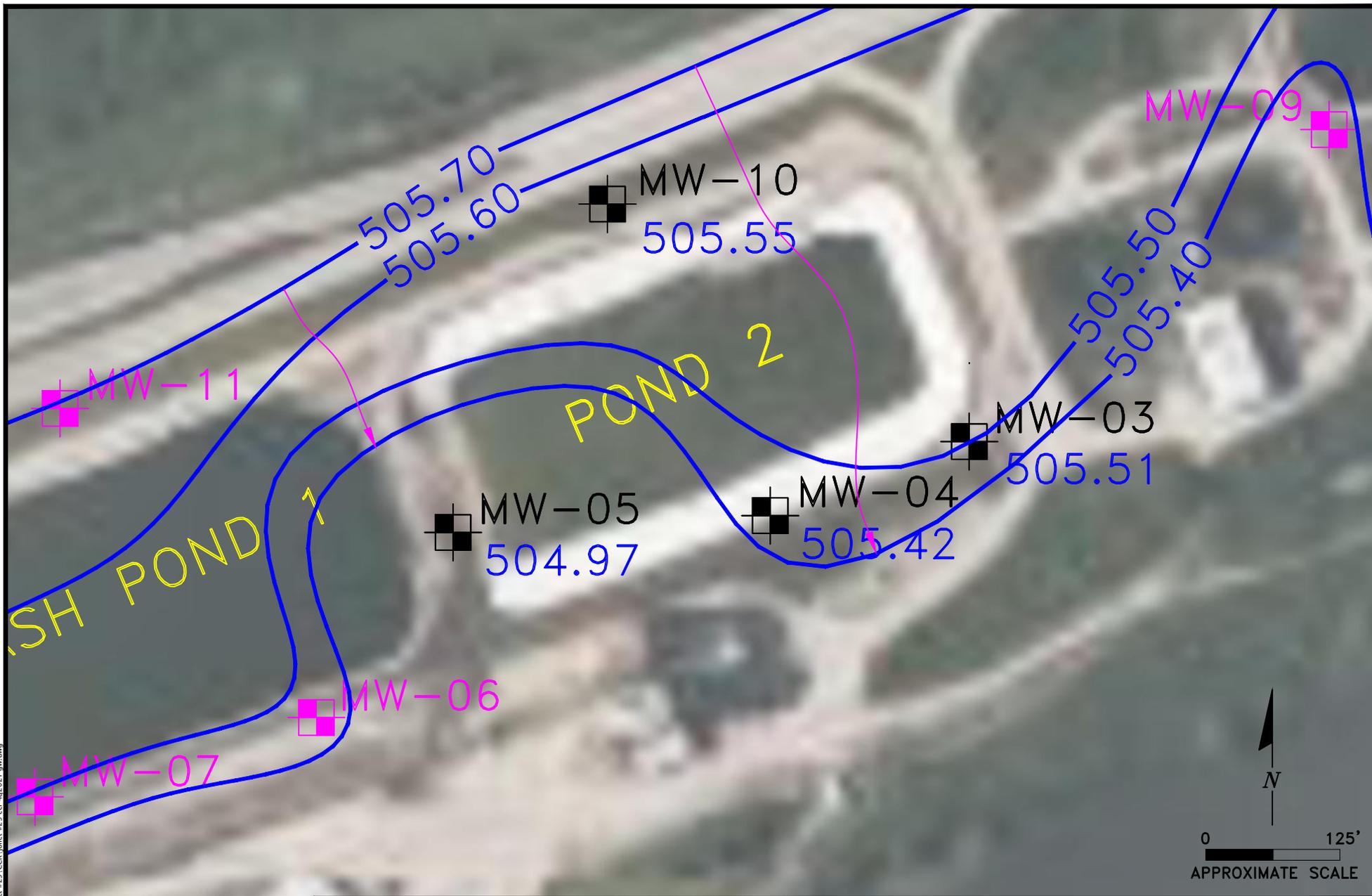
---

14665 West Lisbon Road, Suite 1A Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

---

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

<b>POTENTIOMETRIC MAP 07/2025</b>	
<b>JOLIET #29 GENERATING STATION JOLIET, ILLINOIS</b>	
Scale: 1" = 125'	Date: January 7, 2026
KPRG Project No. 12313.0	ATTACHMENT 1



W:\projects\midwest\generation1\2313\figures\joliet #29\CCR\joliet #29\_ccr\_4q2021.gw.dwg

**LEGEND:**

<span style="color: blue;">—</span>	505 GROUNDWATER CONTOUR LINE
<span style="color: blue;">- - -</span>	505 INFERRED GROUNDWATER CONTOUR LINE
<span style="color: magenta;">→</span>	GROUNDWATER FLOW LINE
MW-05	CCR MONITORING WELL
MW-06	NON-CCR MONITORING WELL

NOTE: AERIAL (MICROSOFT, 2025)

ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R G

KPRG and Associates, inc.

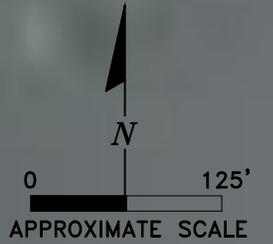
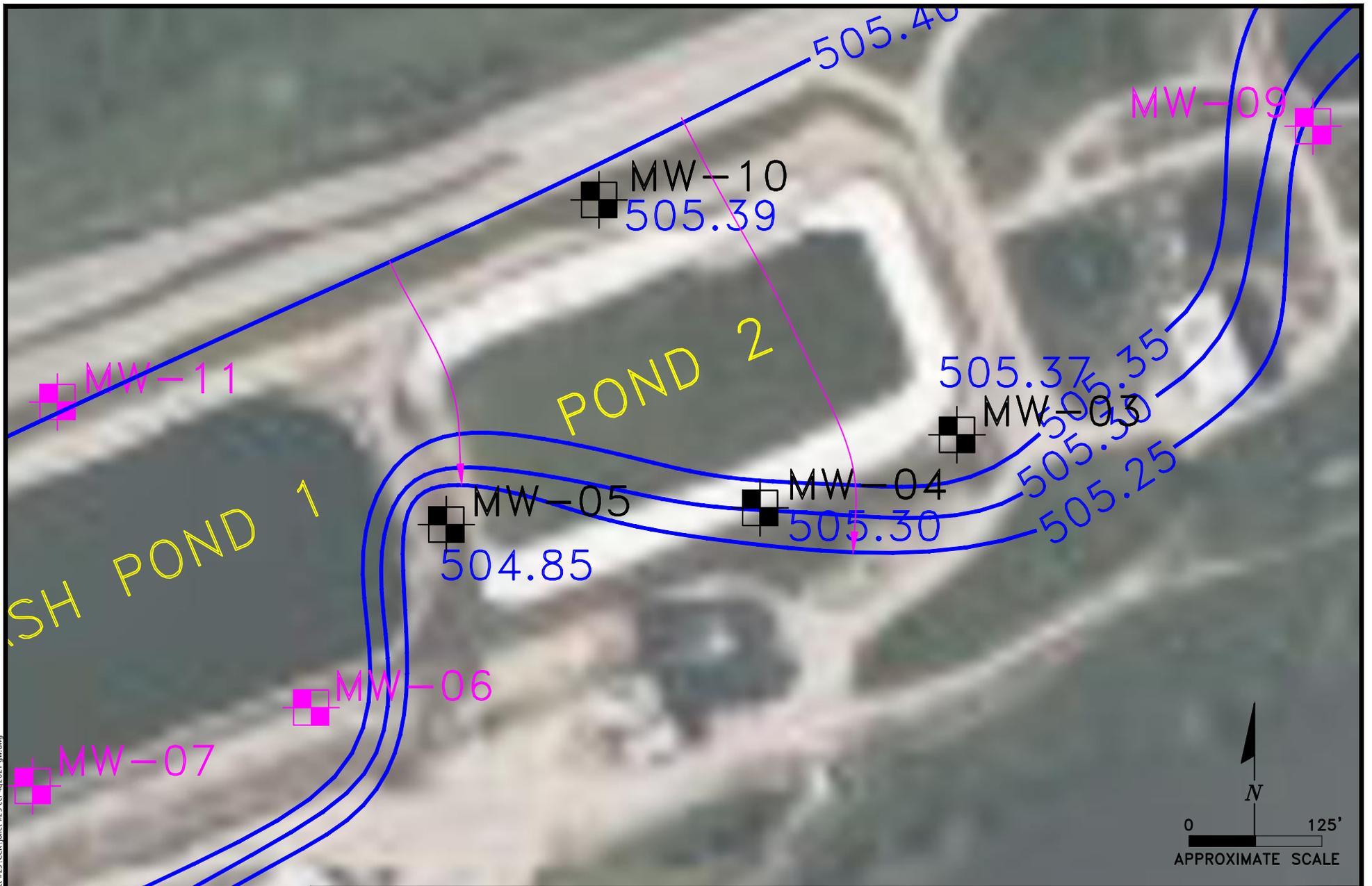
---

14665 West Lisbon Road, Suite 1A Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

---

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

POTENTIOMETRIC MAP 08/2025	
JOLIET #29 GENERATING STATION JOLIET, ILLINOIS	
Scale: 1" = 125'	Date: January 9, 2026
KPRG Project No. 12313.0	ATTACHMENT 1



W:\projects\midwest\generation1\2313\figures\joliet\#29\CCR\joliet\#29\_ccr\_4q2021\_gw.dwg

**LEGEND:**  
 — 505 GROUNDWATER CONTOUR LINE  
 - - - 505 INFERRED GROUNDWATER CONTOUR LINE  
 ← GROUNDWATER FLOW LINE  
 MW-05 CCR MONITORING WELL  
 MW-06 NON-CCR MONITORING WELL  
**NOTE: AERIAL (MICROSOFT, 2025)**

ENVIRONMENTAL CONSULTATION & REMEDIATION

**K P R G** KPRG and Associates, inc.

14665 West Lisbon Road, Suite 1A Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

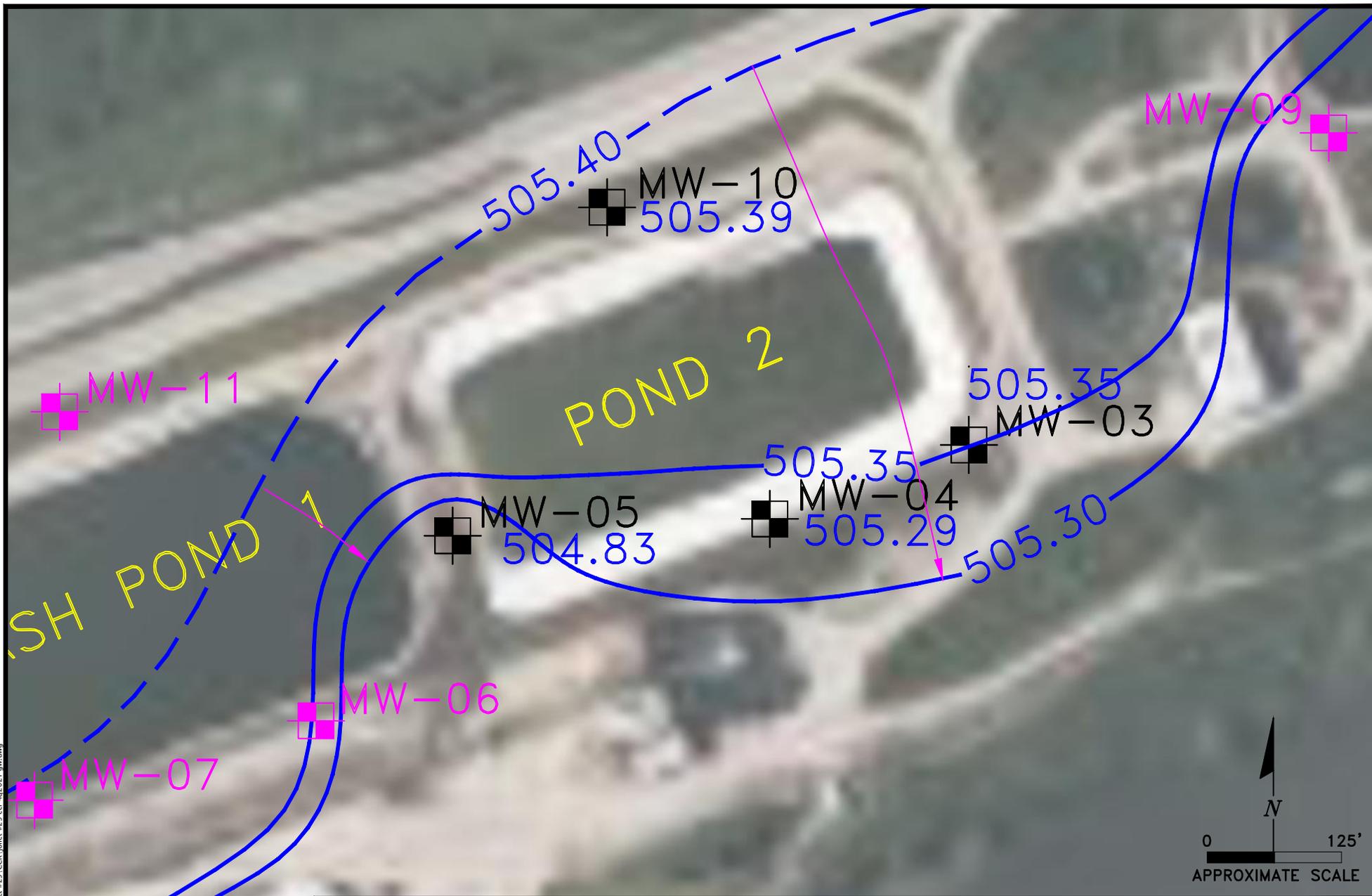
414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

POTENTIOMETRIC MAP 09/2025

JOLIET #29 GENERATING STATION  
 JOLIET, ILLINOIS

Scale: 1" = 125' | Date: January 9, 2026

KPRG Project No. 12313.0 | ATTACHMENT 1



W:\projects\midwest\generation1\2313\figures\joliet #29\CCR\joliet #29\_ccr\_4q2021\_gw.dwg

**LEGEND:**  
 — 505 GROUNDWATER CONTOUR LINE  
 - - - 505 INFERRED GROUNDWATER CONTOUR LINE  
 — GROUNDWATER FLOW LINE  
 MW-05 CCR MONITORING WELL  
 MW-06 NON-CCR MONITORING WELL  
**NOTE: AERIAL (MICROSOFT, 2025)**

ENVIRONMENTAL CONSULTATION & REMEDIATION

**K P R G** KPRG and Associates, inc.

14665 West Lisbon Road, Suite 1A Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

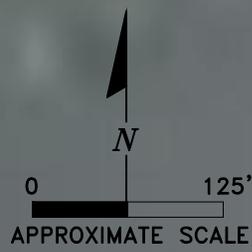
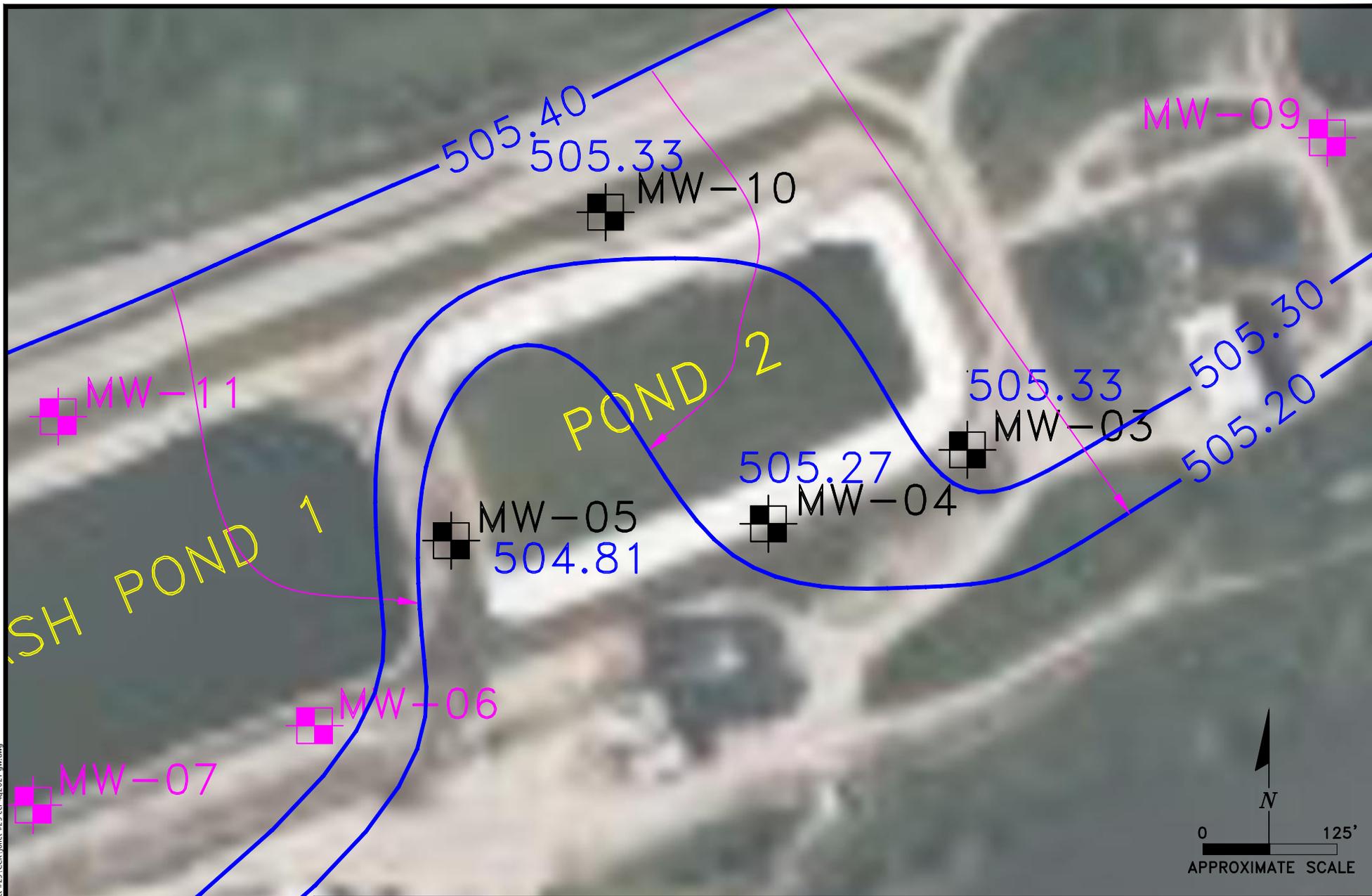
---

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

**POTENTIOMETRIC MAP 10/2025**

**JOLIET #29 GENERATING STATION  
JOLIET, ILLINOIS**

<b>Scale: 1" = 125'</b>	<b>Date: January 16, 2026</b>
<b>KPRG Project No. 12313.0</b>	<b>ATTACHMENT 1</b>



**LEGEND:**  
 — 505 GROUNDWATER CONTOUR LINE  
 - - - 505 INFERRED GROUNDWATER CONTOUR LINE  
 — GROUNDWATER FLOW LINE  
 MW-05 CCR MONITORING WELL  
 MW-06 NON-CCR MONITORING WELL  
**NOTE: AERIAL (MICROSOFT, 2025)**

ENVIRONMENTAL CONSULTATION & REMEDIATION

**K P R G** KPRG and Associates, inc.

14665 West Lisbon Road, Suite 1A Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

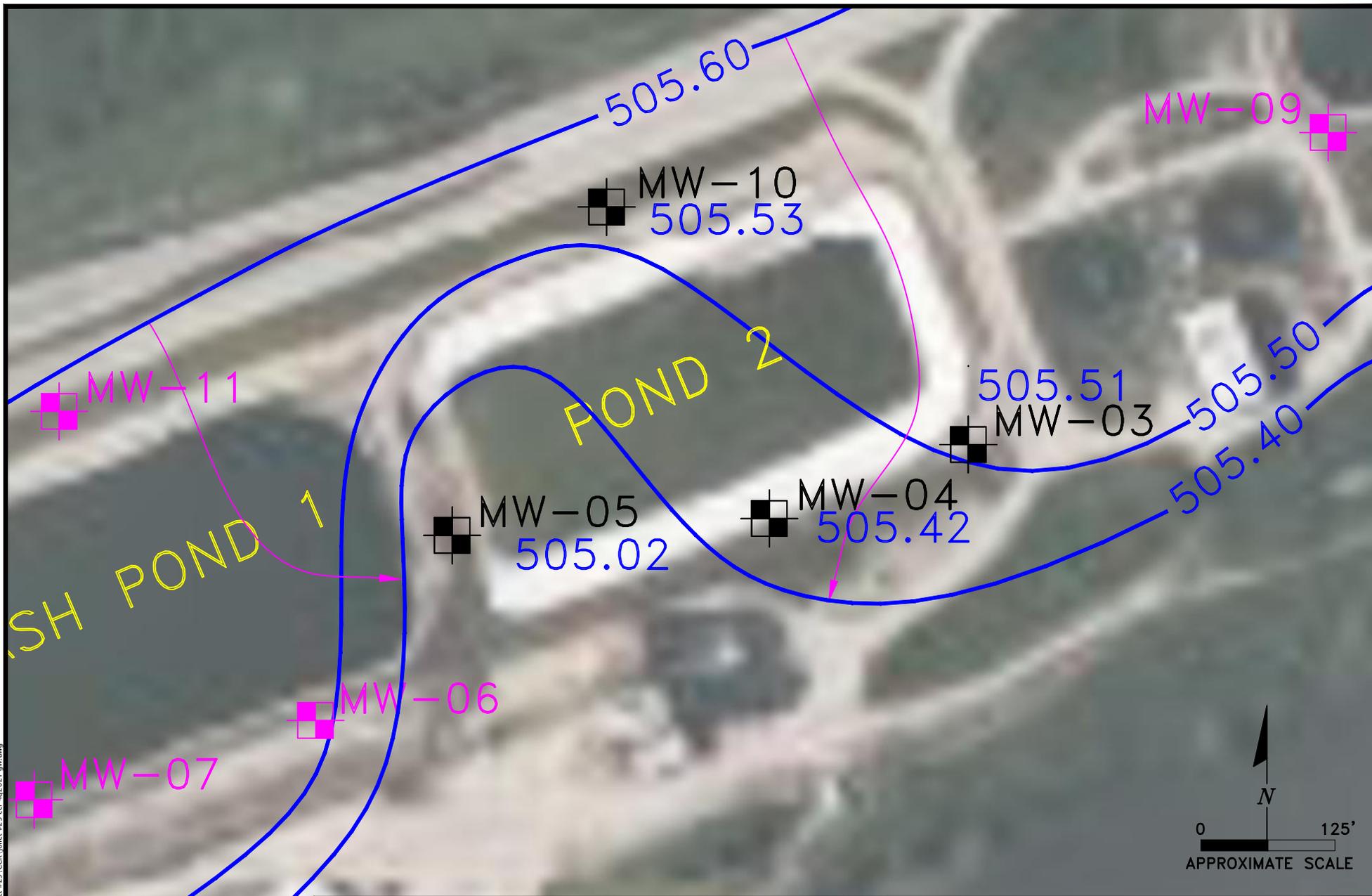
POTENTIOMETRIC MAP 11/2025

JOLIET #29 GENERATING STATION  
 JOLIET, ILLINOIS

Scale: 1" = 125' | Date: January 13, 2026

KPRG Project No. 12313.0 | ATTACHMENT 1

W:\projects\midwest\generation\12313\figures\joliet\#29\CCR\joliet\#29\_ccr\_4q2021.gw.dwg



W:\projects\midwest\generation1\2313\figures\joliet\#29\CCR\joliet\#29\_ccr\_4q2021\_gw.dwg

- LEGEND:**
- 505 GROUNDWATER CONTOUR LINE
  - - - 505 INFERRED GROUNDWATER CONTOUR LINE
  - GROUNDWATER FLOW LINE
  - MW-05 CCR MONITORING WELL
  - MW-06 NON-CCR MONITORING WELL
- NOTE: AERIAL (MICROSOFT, 2025)**

ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R G

KPRG and Associates, inc.

---

14665 West Lisbon Road, Suite 1A Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

---

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

POTENTIOMETRIC MAP 12/2025	
JOLIET #29 GENERATING STATION JOLIET, ILLINOIS	
Scale: 1" = 125'	Date: January 13, 2026
KPRG Project No. 12313.0	ATTACHMENT 1

ATTACHMENT D  
2025 MONTHLY SURFACE  
IMPOUNDMENT WATER ELEVATIONS

Monthly Surface Impoundment Water Elevations  
 Midwest Generation, LLC - Joliet 29 Station, Joliet, IL

Well ID	Date	Basin Gauge Level (ft)	Basin Surface Elevation (ft above MSL)
Pond 2	02/16/22	3.60	521.1
	03/06/22	3.80	521.3
	04/05/22	4.20	521.7
	05/23/22	4.70	522.2
	06/30/22	4.30	521.8
	07/19/22	4.40	521.9
	08/30/22	4.70	522.2
	09/20/22	4.60	522.1
	10/13/22	4.40	521.9
	11/08/22	4.50	522.0
	12/20/22	4.90	522.4
	01/26/23	5.00	522.5
	02/21/23	6.40	523.9
	03/15/23	5.50	523.0
	04/20/23	5.60	523.1
	05/19/23	6.50	524
	06/08/23	6.20	523.7
	07/19/23	6.10	523.6
	08/29/23	5.95	523.5
	09/21/23	6.35	523.9
	10/25/23	6.58	524.1
	11/14/23	6.45	524.0
	12/07/23	6.58	524.0
	01/23/24	7.80	523.5
	02/20/24	7.00	524.5
	03/13/24	7.20	524.7
	04/19/24	7.53	525.0
	05/21/24	8.18	525.7
	06/19/24	6.25	523.8
	07/29/24	1.80	519.3
	08/22/24	1.90	519.4
	09/23/24	1.60	519.1
	10/28/24	1.70	519.2
	11/07/24	1.80	519.3
	12/17/24	1.90	519.4
	01/27/25	2.10	519.6
02/10/25	2.10	519.6	
03/10/25	2.35	519.6	
04/11/25	2.80	519.6	
05/16/25	2.65	520.2	
06/25/25	2.50	520.0	
07/18/25	2.60	520.1	
08/07/25	2.38	519.9	
09/15/25	2.70	520.2	
10/23/25	1.83	519.3	
11/05/25	1.75	519.3	
12/17/25	1.90	519.4	