



ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

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

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

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January 31, 2026

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OVERVIEW

Groundwater monitoring requirements in accordance with the Federal Register, Environmental Protection Agency, 40 CFR Parts 257.94, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule dated April 17, 2015 (CCR Rule) and subsequent amendments, 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 CCR Rule for Ash Pond 2. The monitoring well network around this pond consists of four monitoring wells (MW-3, MW-4, MW-5 and MW-10 [upgradient]) as shown on Figure 1.

This overview of the 2025 groundwater monitoring period is provided in accordance with requirements under Section 257.90(e)(6). Each required item is discussed separately below.

- Section 257.90(e)(6)(i) – At the start of the current monitoring period, the subject CCR unit was operating under the detection monitoring program outlined in Section 257.94.
- Section 257.90(e)(6)(ii) – At the end of the current monitoring period, the subject CCR unit continues to operate under the detection monitoring program outlined in Section 257.94.
- Section 257.90(e)(6)(iii) – The following verified potential statistically significant increases (SSIs) above established background for Appendix III detection monitoring constituents were noted during this reporting period:
 - MW-10 – Sulfate (1st through 4th quarters); total dissolved solids (TDS; 1st through 4th quarters); fluoride (3rd quarter)
 - MW-03 – TDS (1st through 4th quarters); sulfate (1st through 4th quarters); fluoride (3rd quarter)
 - MW-04 – Sulfate (1st through 4th quarters); TDS (3rd through 4th quarters); fluoride (3rd quarter)
 - MW-05 – TDS (2nd and 3rd quarters); sulfate (1st through 4th quarters)

Well MW-10 is the upgradient monitoring point.

The third quarter elevated fluoride in wells MW-10 (upgradient), MW-03 and MW-04 was not replicated during subsequent sampling events and was only detected above the prediction limit one other time historically since start of detection monitoring in 2017. The potential SSIs for TDS and sulfate have been addressed under a completed and previously

submitted Alternate Source Demonstrations (ASD) in 2021 with determination being made that the SSIs are not associated with a release from the regulated unit.

- Section 257.90(e)(6)(iv) – The subject site is not in assessment monitoring.
- Section 257.90(e)(6)(v) – The subject unit is not under corrective action.
- Section 257.90(e)(6)(vi) – The subject unit is not under corrective action.

1.0 INTRODUCTION

The Detection Monitoring requirements in accordance with the Federal Register, Environmental Protection Agency, 40 CFR Parts 257.94, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule dated April 17, 2015 (CCR Rule) and subsequent amendments 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 CCR Rule for Ash Pond 2 which no longer contains any ash, however, the warning layer and liner are still in place. The monitoring well network around this pond consists of four monitoring wells (MW-3, MW-4, MW-5 and MW-10 [upgradient]) as shown on Figure 1.

This annual report covers the work performed relative to CCR groundwater monitoring for the 2025 calendar year. It does not duplicate information or activities reported in previous years. It is prepared in accordance with Section 257.90(e)(1-6) and summarizes the sampling procedures used, provides an evaluation of groundwater flow conditions, summarizes the analytical data generated and provides a discussion of the statistical evaluations completed as a basis for determining the appropriate next phase of compliance activities.

2.0 FIELD PROCEDURES AND GROUNDWATER FLOW EVALUATION

2.1 Field Procedures

As previously noted, the CCR groundwater monitoring network for Ash Pond 2 consists of four wells (MW-3, MW-4, MW-5 and MW-10) as shown on Figure 1. As part of sampling procedures, the integrity of all monitoring wells was inspected and water levels were obtained using an electronic water level meter (see summary of water level discussion below). During all sampling events, the wells were found in good condition with locked protector casings, and the concrete surface seals were intact.

All groundwater samples were collected using the low-flow sampling technique from dedicated pumps. The samples were not filtered prior to analysis to provide for total metals concentrations as opposed to dissolved metals concentrations. One duplicate sample was collected from a randomly selected monitoring well per sampling event for quality assurance purposes.

2.2 Groundwater Flow Evaluation

Water level data measurements were obtained from each well during each round of groundwater monitoring. A complete round of water levels was collected prior to initiating sampling, and the water level data are summarized in Table 1. The water levels were used to generate a groundwater flow map for each sampling event. These maps are provided as Attachment 1. A review of the maps indicates a consistent generally southerly groundwater flow direction toward the intake channel and a shallow horizontal hydraulic gradient. This is consistent with historical trends. In accordance with general groundwater sampling requirements under Section 257.93(c), Table 2 provides a summary of the flow direction and an estimated rate of groundwater flow for each sampling event. The flow rate was calculated using the following equation:

$$V_s = \frac{Kdh}{n_e dl}, \text{ where}$$

V_s is seepage velocity (distance/time)

K is hydraulic conductivity (distance/time)

dh/dl is hydraulic gradient (unitless)

n_e is effective porosity (unitless)

The hydraulic conductivity used in Table 2 was based on a re-evaluation of slug test data performed by Patrick Engineering as part of a hydrogeologic assessment dated February 2011. The estimated effective porosity of the aquifer materials (0.35) was obtained from literature (Applied Hydrogeology, Fetter, 1980).

3.0 ANALYTICAL DATA AND STATUS OF EVALUATIONS

3.1 Sampling Summary

The groundwater sampling summary from 2025 is provided in Table 3, in accordance with 257.90 (e)(3). Analytical data packages are included in Attachment 2.

3.2 Data Summary

The analytical data from the detection monitoring groundwater samples for Appendix III parameters are provided in Table 4. Quarterly groundwater sampling was completed for Appendix III in 2025 which exceeds the minimum detection monitoring requirements under Section 257.94. The table includes the sample dates and whether the specific well is considered upgradient or downgradient relative to groundwater flow and the regulated unit. For each monitoring event a duplicate sample was collected. Confirmatory resampling in accordance with CCR Compliance Statistical Approach for Groundwater Data Evaluation for Joliet #29 Station dated October 10, 2017 were limited to any potential statistically significant increases (SSI) for specific parameters at specific wells for which previous ASDs were not completed.

Relative to the other potential SSIs for TDS, sulfate, and chloride noted for 2022 sampling, an ASD was completed on October 11, 2021, and was included in the Annual Groundwater Monitoring and Corrective Action Report – 2021 dated January 31, 2022. The results of the ASD concluded that the noted SSIs for TDS, sulfate, and chloride were not associated with a potential release from Ash Pond 2 but rather an alternate transient source of impacts, potentially from upgradient and offsite. The detections of these parameters during the 2025 sampling were within the same range or less than in previous sampling events.

3.3. Current Status

Joliet Generating Station #29 – Pond 2 is currently, and continues to be, in detection monitoring. There has been no transition between monitoring programs in 2025.

4.0 SUMMARY/CONCLUSIONS AND RECOMMENDATIONS

The detection monitoring requirements in accordance with the Federal CCR Rule have successfully been met. At this time it is recommended to continue with detection monitoring in accordance with Section 257.94 of the Federal CCR Rule.

5.0 REFERENCES

- Federal Register, Environmental Protection Agency, 40 CFR Parts 257 and 261, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Final Rule. Vol. 80, No. 74, Friday April 17, 2015.
- Fetter, C.W. Jr., Applied Hydrogeology. Charles E. Merrill Publishing Co., 1980.
- KPRG and Associates, Inc., CCR Compliance Monitoring, Sampling and Analysis Plan, Midwest Generation, LLC Joliet #29 Generating Station. October 10, 2017.
- KPRG and Associates, Inc., CCR Compliance Statistical Approach for Groundwater Data Evaluation, Midwest Generation, LLC Joliet #29 Generating Station. October 10, 2017.
- KPRG and Associates, Inc., CCR Groundwater Monitoring Statistical Evaluation Summary - 2017, Midwest Generation, LLC Joliet #29 Generating Station. January 12, 2018.
- KPRG and Associates, Inc., CCR Annual Groundwater Monitoring and Corrective Action Report - 2017, Midwest Generation, LLC Joliet #29 Generating Station. January 31, 2018.
- KPRG and Associates, Inc., CCR Annual Groundwater Monitoring and Corrective Action Report - 2018, Midwest Generation, LLC Joliet #29 Generating Station. January 31, 2019.
- KPRG and Associates, Inc., CCR Annual Groundwater Monitoring and Corrective Action Report - 2019, Midwest Generation, LLC Joliet #29 Generating Station. January 31, 2020.
- KPRG and Associates, Inc., CCR Annual Groundwater Monitoring and Corrective Action Report - 2020, Midwest Generation, LLC Joliet #29 Generating Station. January 31, 2021.
- KPRG and Associates, Inc., Alternate Source Demonstration – CCR Groundwater Monitoring Joliet #29 Generating Station, October 11, 2021.
- KPRG and Associates, Inc., CCR Annual Groundwater Monitoring and Corrective Action Report - 2021, Midwest Generation, LLC Joliet #29 Generating Station. January 31, 2022.
- KPRG and Associates, Inc., CCR Annual Groundwater Monitoring and Corrective Action Report - 2022, Midwest Generation, LLC Joliet #29 Generating Station. January 31, 2023.
- KPRG and Associates, Inc., CCR Annual Groundwater Monitoring and Corrective Action Report - 2023, Midwest Generation, LLC Joliet #29 Generating Station. January 31, 2024.

- KPRG and Associates, Inc., CCR Annual Groundwater Monitoring and Corrective Action Report - 2024, Midwest Generation, LLC Joliet #29 Generating Station. January 31, 2025.
- KPRG and Associates, Inc., Alternate Source Demonstration – CCR Groundwater Monitoring Joliet #29 Generating Station, April 11, 2023.
- Patrick Engineering, Inc., Hydrogeologic Assessment Report – Joliet Generating Station No. 29, Joliet, IL. February 2011.

FIGURE

NOTE:
BACKGROUND MAP RETRIEVED FROM GOOGLE MAPS 2013

MW-10

ASH POND 2

MW-3

MW-4

MW-5

LEGEND

MW-1

EXISTING CCR MONITORING
WELL

ENVIRONMENTAL CONSULTATION & REMEDIATION

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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



TABLES

Table 1. 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 1. 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 1. 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 1. 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 2. 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
4/29/2025	Southerly (SSW-SSE)	1.968E-03	0.0014	0.35	0.66
8/7/2025	Southerly (SSW-SSE)	1.968E-03	0.0010	0.35	0.50
11/5/2025	Southerly (SSW-SSE)	1.968E-03	0.0006	0.35	0.29

* 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 3. CCR Groundwater Sample Collection Summary for 2024 - Joliet #29 Generating Station

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

Table 4. Appendix III Groundwater Analytical Results - Midwest Generation, LLC, Joliet Station #29, Joliet, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids	
MW-10 upgradient	10/28/2015	0.47	100	200	0.41	7.04	84	790	
	2/10/2016	0.41	100	210	0.44	7.17	120	820	
	5/12/2016	0.29	100	300	0.42	7.02	110	920	
	8/31/2016	0.36	89	170	0.46	6.95	100	760	
	11/2/2016	0.48	100	130	0.45	6.99	95	720	
	2/6/2017	0.44	120	190	0.36	6.99	88	820	
	4/26/2017	0.35	120	200	0.35	7.27	87	760	
	6/14/2017	0.29	91	160	0.43	7.47	75	690	
	Pred. Limit*	0.57	131	318	0.51	7.56-6.67	131	959	
	8/2/2017	0.45	97	170	0.38	7.23	110	750	
	10/18/2017	0.61	120	140	0.41	7.11	130	820	
	4/24/2018	0.4	110	260	0.39	7.28	120	910	
	10/17/2018	0.63	120	180	0.42	7.30	110	810	
	11/24/2018 R	0.44	NA	NA	NA	NA	NA	NA	
	5/7/2019	0.56	130	410	0.39	7.17	95	1,000	
	7/3/2019 R	NA	NA	230	NA	NA	NA	830	
	11/7/2019	0.35	90	130	0.36	7.40	59	650	
	5/20/2020	0.85	120	250	0.41	6.90	100	960	
	6/11/2020 R	0.26	NA	NA	NA	NA	NA	770	
	10/22/2020	0.34	110	230	0.41	7.11	93	850	
	5/18/2021	0.33	140	350	0.39	7.16	210	1,200	
	6/29/2021 R	NA	160	420	NA	7.32	190	1,300	
	8/30/2021	0.28	120	330	0.37	7.56	170	990	
	11/16/2021	0.39	120	260	0.38	7.01	150	1,000	
	3/3/2022	0.47	120	280	0.41	7.05	190	1,000	
	5/26/2022	0.39	120	280	0.41	6.90	160	1,000	
	8/31/2022	0.33	110	240	0.41	6.58	160	970	
	11/9/2022	0.32	110	240	0.57	7.00	150	880	
	12/20/2022 R	NS	NS	NS	0.68	NS	NS	NS	
	2/28/2023	0.36	130	330	0.38	7.06	170	1,200	
	5/3/2023	0.37	130	310	0.39	6.99	190	1,100	
	7/20/2023	0.33	110	250	0.39	6.95	160	960	
	10/26/2023	0.40	120	300	0.41	6.96	160	1,100	
	1/23/2024	0.49	110	260	0.37	6.96	160	970	
	5/22/2024	0.38	110	180	0.41	7.17	120	840	
	7/30/2024	0.44	120	170	0.38	7.58	150	880	
	10/29/2024	0.46	130	220	0.38	7.30	160	1000	
	1/29/2025	0.50	140	250	0.40	7.13	150	1100	
	3/27/25 R	NA	130	NA	NA	NA	NA	NA	
	4/30/2025	0.38	120	280	0.42	7.27	170	1100	
	8/7/2025	0.35	110	240	0.60	7.01	180	1000	
	11/6/2025	0.39	120	220	0.45	6.97	170	1000	
MW-03 downgradient	10/28/2015	0.34	110	230	0.41	7.11	110	960	
	2/10/2016	0.49	100	220	0.44	7.31	130	790	
	5/10/2016	0.48	95	240	0.44	7.07	130	800	
	8/31/2016	0.49	100	250	0.45	7.18	120	920	
	11/2/2016	0.34	87	190	0.44	7.45	94	780	
	2/6/2017	0.40	97	140	0.39	7.35	77	720	
	4/26/2017	0.54	100	210	0.36	7.03	120	820	
	6/14/2017	0.45	88	190	0.44	7.48	75	760	
	Pred. Limit	0.57	131	316	0.51	7.56-6.67	130	956	
	8/2/2017	0.41	99	200	0.40	7.34	110	850	
	10/18/2017	0.35	93	160	0.42	7.11	100	850	
	4/24/2018	0.52	100	220	0.42	7.2	150	930	
	7/31/2018 R	NA	NA	NA	NA	NA	110	NA	
	10/17/2018	0.25	100	250	0.4	7.04	110	870	
	5/7/2019	0.43	120	280	0.4	7.27	140	880	
	7/3/2019 R	NA	NA	NA	NA	NA	65	NA	
	11/7/2019	0.34	100	150	0.4	7.32	65	660	
	5/20/2020	0.38	100	230	0.42	7.56	78	960	
	6/11/2020 R	NA	NA	NA	NA	NA	NA	930	
	10/22/2020	0.32	110	180	0.43	7.23	90	770	
	5/18/2021	0.28	130	290	0.4	7.13	190	1,200	
	6/29/2021 R	NA	NA	NA	NA	7.34	210	1,300	
	11/16/2021	0.3	130	280	0.37	7.11	150	1,000	
	3/3/2022	0.3	130	270	0.4	7.05	180	1,300	
	5/26/2022	0.39	120	280	0.41	6.98	160	1,100	
	8/31/2022	0.23	110	270	0.39	6.25	130	1,200	
	11/9/2022	0.25	120	300	0.54	7.03	140	1,100	
	2/28/2023	0.3	120	280	0.37	7.06	160	1,000	
	5/3/2023	0.36	130	250	0.37	6.97	200	980	
	7/20/2023	0.32	130	250	0.36	6.86	190	1,000	
	10/26/2023	0.31	130	300	0.40	6.93	170	1,100	
	1/23/2024	0.34	96	240	0.42	7.01	160	990	
	5/22/2024	0.49	110	220	0.43	7.07	170	990	
	7/30/2024	0.44	100	170	0.41	7.56	130	820	
	10/29/2024	0.40	110	180	0.39	7.38	130	1,000	
	1/29/2025	F1 F2	0.37	F2	130	230	0.43	7.17	150
	4/30/2025	0.44	130	280	0.40	7.23	160	1000	
	8/7/2025	0.28	120	270	0.61	7.04	180	1200	
	11/6/2025	0.38	130	300	0.45	7.07	200	1100	

Notes: All units are in mg/L (milligrams/liter) with the exception of pH (standard units).

Italicized Date - First round of Detection Monitoring and resample after statistical background establishment.

Pred. Limit - Prediction Limit.

BOLD - Potential statistically significant increase relative to interwell Prediction Limit.

* - Intrawell Prediction Limit. All others are interwell comparisons with MW-10 as background..

F1 - MS and/or MSD recovery outside of limits.

F2 - MS/MSD RPD outside of limits

NA - Not Analyzed.

R - Resample

Table 4. Appendix III Groundwater Analytical Results - Midwest Generation, LLC, Joliet Station #29, Joliet, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
MW-04 downgradient	10/28/2015	0.34	94	F1 200	0.45	7.07	83	740
	2/10/2016	0.32	97	210	0.47	7.22	140	810
	5/10/2016	0.47	100	260	0.46	6.71	150	900
	8/31/2016	0.42	100	210	0.45	7.07	120	890
	11/2/2016	0.32	98	160	0.43	7.25	83	750
	2/6/2017	0.40	110	200	0.37	7.19	98	790
	4/26/2017	0.33	100	220	0.37	7.46	89	770
	6/14/2017	0.37	92	190	0.47	7.43	80	770
	Pred. Limit	0.57	131	316	0.51	7.56-6.67	130	956
	8/2/2017	0.35	93	180	0.43	7.41	100	770
	10/18/2017	0.54	97	140	0.45	7.2	120	790
	4/24/2018	0.4	110	240	0.43	7.21	160	940
	7/31/2018 R	NA	NA	NA	NA	NA	120	NA
	10/17/2018	0.29	100	230	0.45	7.2	130	840
	5/7/2019	0.76	120	340	0.42	7.27	120	1,000
	7/3/2019 R	0.23	NA	250	NA	NA	NA	870
	11/6/2019	0.3	77	140	0.41	7.33	53	670
	5/20/2020	0.79	110	250	0.45	7.3	110	1,100
	6/11/2020 R	0.28	NA	NA	NA	NA	NA	850
	10/22/2020	0.33	100	190	0.48	7.15	83	770
	5/18/2021	0.22	120	280	0.42	7.3	190	1,100
	6/29/2021 R	NA	NA	NA	NA	7.36	190	1,200
	11/16/2021	0.3	130	290	0.42	7.11	140	1,000
	3/3/2022	0.31	120	220	0.42	7.11	170	1,300
	5/26/2022	0.26	110	290	0.44	6.94	150	1,100
	8/31/2022	0.32	120	240	0.45	6.38	150	870
	11/9/2022	0.34	120	240	0.61	7.08	150	940
	2/28/2023	0.34	120	280	0.40	7.16	150	1,100
	5/3/2023	0.28	110	290	0.40	6.97	160	1,100
	7/20/2023	0.37	120	240	0.41	7.02	180	970
	10/26/2023	0.31	120	320	0.43	6.95	140	1,100
	12/17/2023 R	NS	NS	280	NS	NS	NS	NS
	1/23/2024	0.42	99	200	0.38	6.93	150	970
	5/22/2024	0.39	110	200	0.41	7.12	120	910
	7/30/2024	0.34	110	170	0.42	7.45	120	860
	10/29/2024	0.38	120	190	0.43	7.32	120	980
	1/29/2025	0.36	120	210	0.46	7.16	140	920
	4/30/2025	0.35	130	290	0.39	7.27	160	1000
	8/7/2025	0.32	110	240	0.65	7.04	160	1100
	11/6/2025	0.33	120	250	0.49	7.01	170	970
MW-05 downgradient	10/28/2015	0.64	100	160	0.39	7.12	120	790
	2/10/2016	0.46	110	220	0.39	7.25	120	790
	5/10/2016	0.8	150	220	0.46	6.88	290	950
	8/31/2016	1.0	140	99	0.56	6.81	260	820
	11/2/2016	0.41	98	130	0.37	7.26	100	700
	2/6/2017	0.48	150	180	0.30	7.22	120	790
	4/26/2017	0.67	110	F1 190	0.37	7.28	170	770
	6/14/2017	0.44	75	150	0.46	7.45	110	670
	Pred. Limit	0.57	131	316	0.51	7.56-6.67	130	956
	8/2/2017	0.28	83	170	0.35	7.30	99	770
	10/18/2017	0.42	110	110	0.38	7.16	95	720
	4/24/2018	0.31	110	300	0.34	7.33	130	1,000
	7/31/2018 R	NA	NA	NA	NA	NA	NA	940
	10/17/2018	0.31	110	210	0.36	7.29	93	810
	5/6/2019	0.38	130	500	0.31	7.11	84	1,300
	7/3/2019 R	NA	NA	150	NA	NA	NA	890
	11/7/2019	0.31	180	130	0.3	7.44	64	590
	12/4/2019 R	NA	89	NA	NA	NA	NA	NA
	5/20/2020	0.32	100	270	0.37	7.03	67	890
	10/22/2020	0.52	92	180	0.38	7.16	85	720
	5/18/2021	0.37	130	410	0.3	7.00	160	1,300
	6/29/2021 R	NA	NA	430	NA	7.33	150	1,300
	11/16/2021	0.44	120	260	0.3	7.08	140	970
	3/3/2022	0.43	110	230	0.3	7.04	140	900
	5/26/2022	0.55	120	320	0.31	6.86	140	1,100
	8/31/2022	0.43	110	240	0.32	6.50	130	1,100
	11/9/2022	0.39	120	230	0.42	7.00	120	910
	2/28/2023	0.60	160	130	0.35	7.15	260	980
	3/23/2023 R	NA	130	NA	NA	NA	170	NA
	5/3/2023	0.50	110	270	0.30	6.96	120	910
	7/20/2023	0.45	110	240	0.30	6.94	120	900
	10/26/2023	0.42	110	220	0.32	6.96	150	910
	1/23/2024	0.49	110	210	0.29	6.93	210	1,000
	5/22/2024	0.58	110	260	0.34	7.07	180	1,100
	7/30/2024	0.52	100	150	0.31	7.45	140	750
	10/29/2024	0.48	100	150	0.32	7.34	150	840
	1/29/2025	0.50	120	180	0.34	7.16	170	920
	4/30/2025	0.53	130	370	0.32	7.30	210	1300
	8/7/2025	0.41	110	240	0.49	7.03	170	1100
	11/6/2025	0.51	95	200	0.37	7.04	150	890

Notes: All units are in mg/L (milligrams/liter) with the exception of pH (standard units).

Italicized Date - First round of Detection Monitoring and resample after statistical background establishment.

Pred. Limit - Prediction Limit.

BOLD - Potential statistically significant increase relative to interwell Prediction Limit.

* - Intra-well Prediction Limit. All others are interwell comparisons with MW-10 as background..

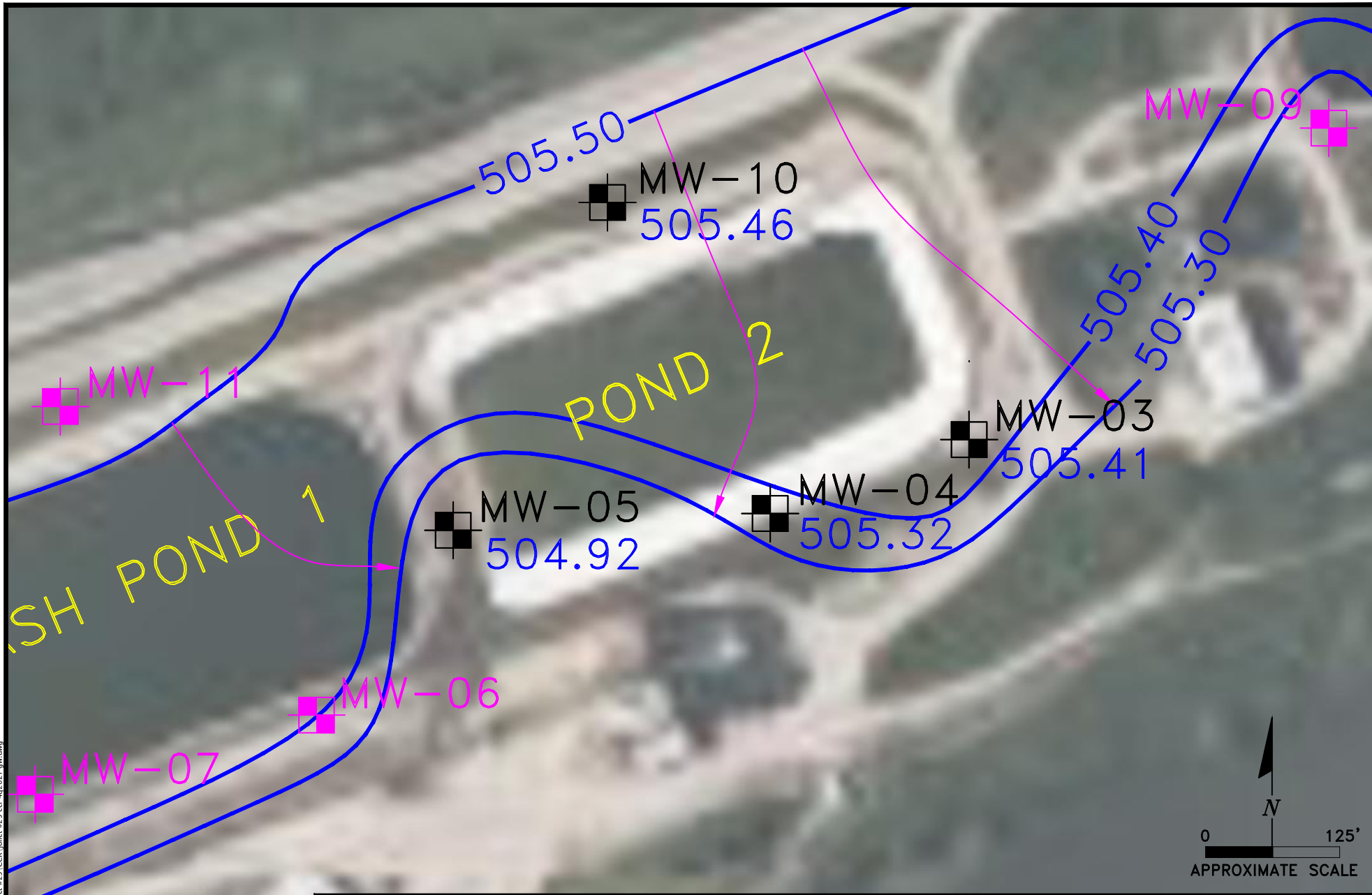
F1 - MS and/or MSD recovery outside of limits.

F2 - MS/MSD RPD outside of limits

NA - Not Analyzed.

R - Resample

ATTACHMENT 1
Groundwater Flow Contour Maps



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

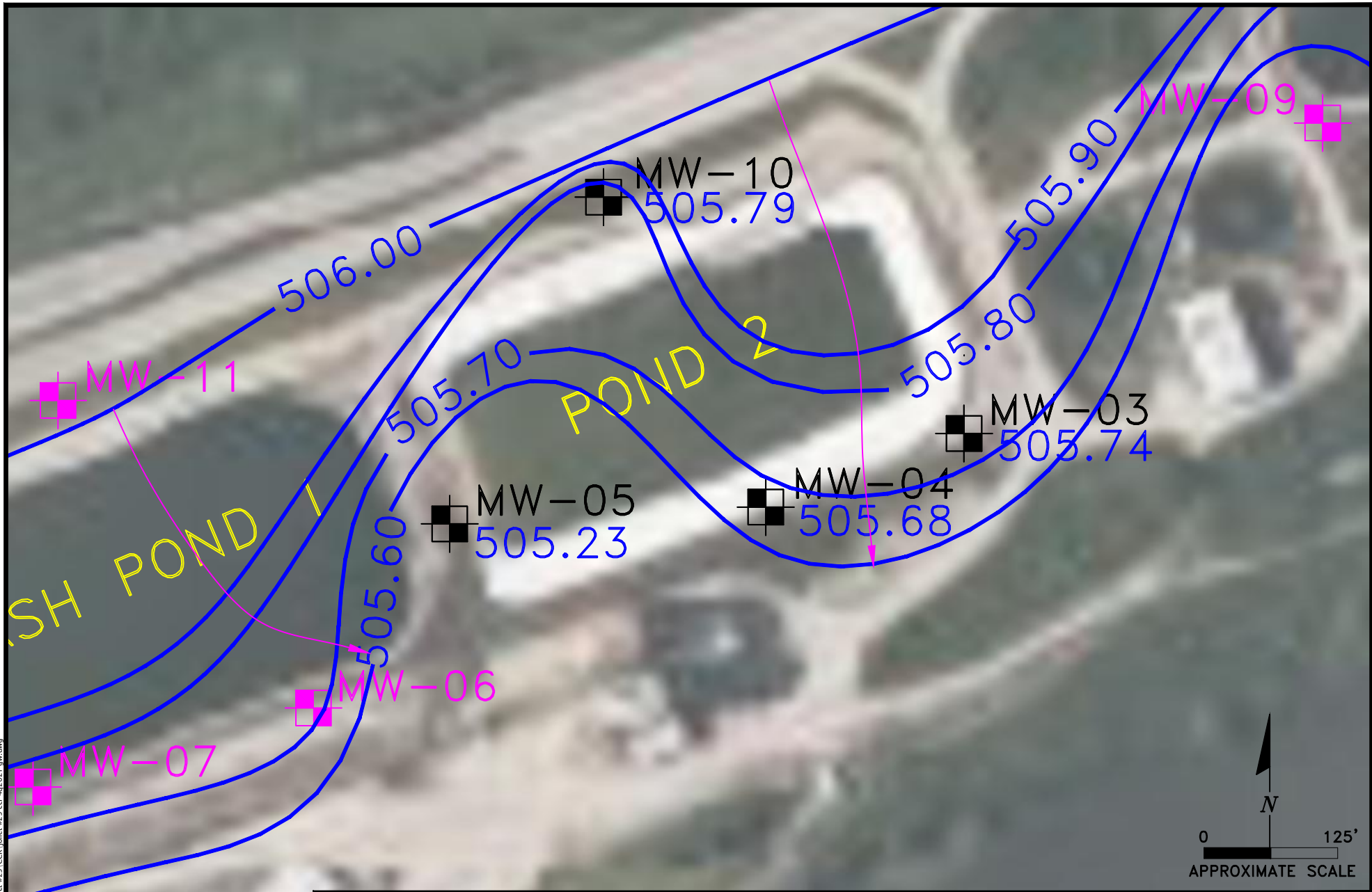
414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

CCR GROUNDWATER CONTOUR MAP 1Q2025

JOLIET #29 GENERATING STATION
JOLIET, ILLINOIS

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

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KPRG and Associates, inc.

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

CCR GROUNDWATER CONTOUR MAP 2Q2025

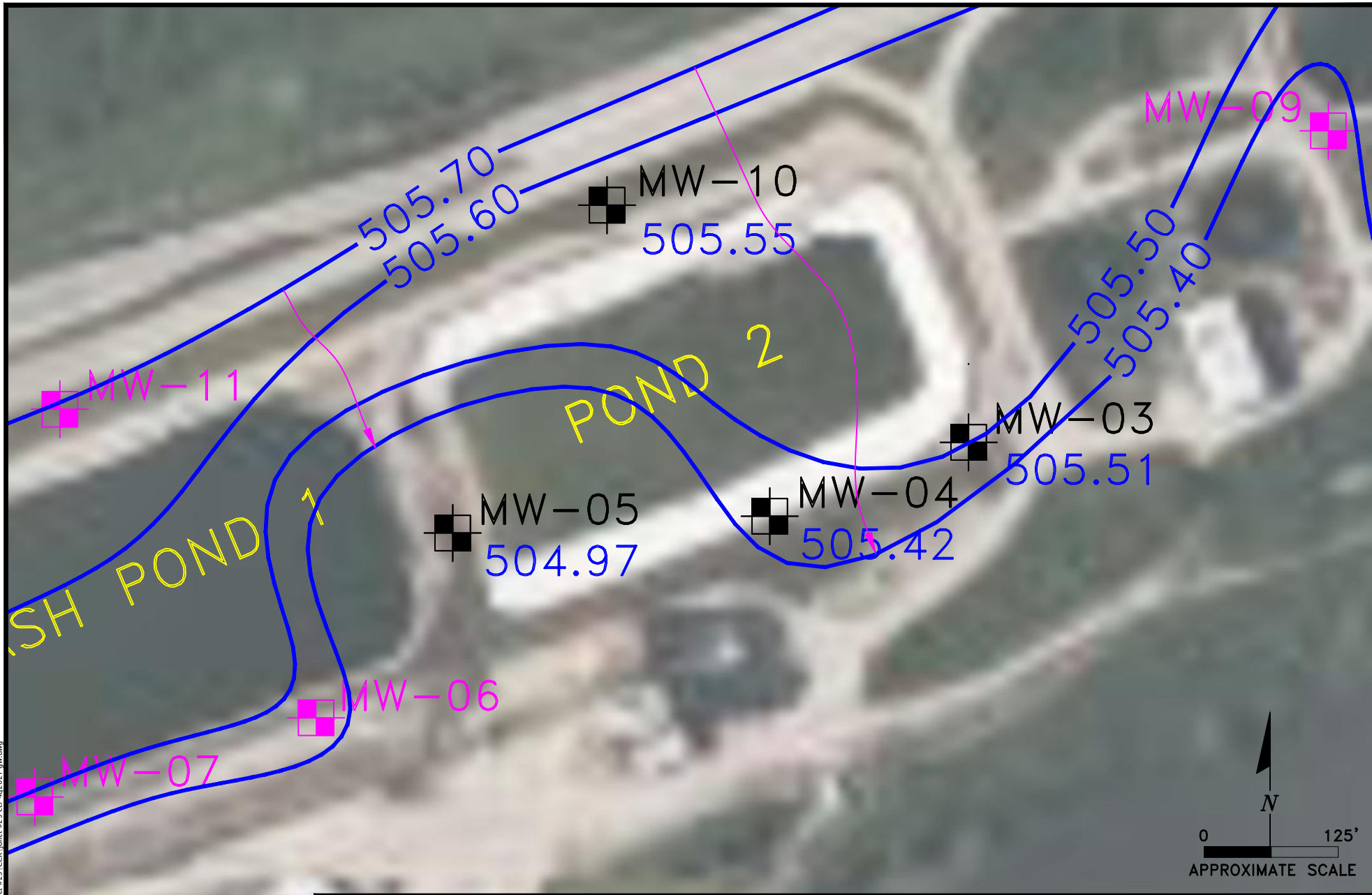
JOLIET #29 GENERATING STATION
JOLIET, ILLINOIS

Scale: 1" = 125'

Date: January 13, 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

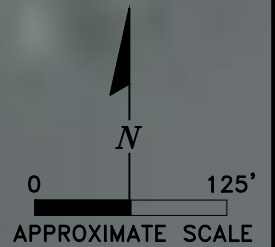
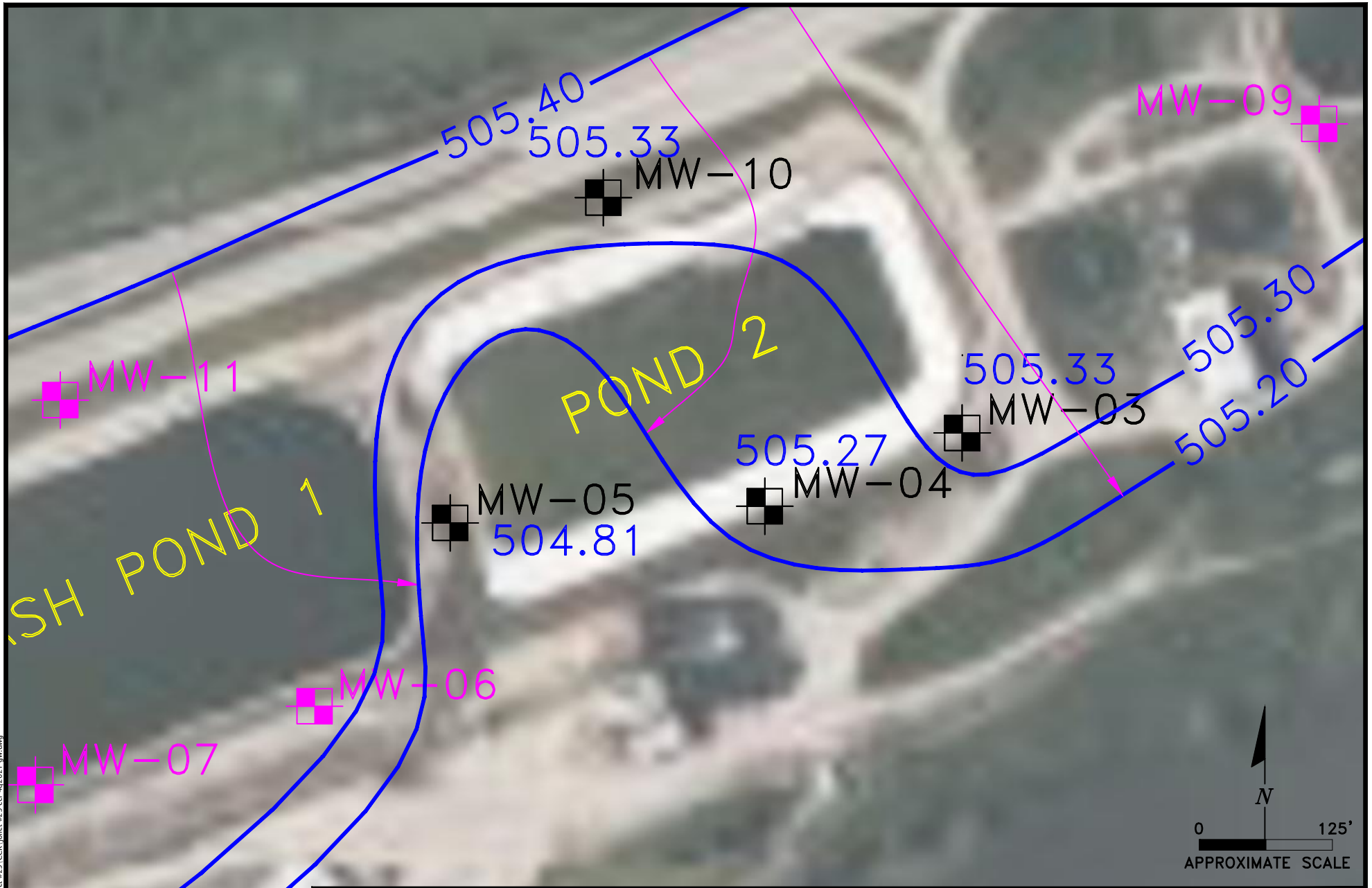
414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

CCR GROUNDWATER CONTOUR MAP 3Q2025

JOLIET #29 GENERATING STATION
JOLIET, ILLINOIS

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

CCR GROUNDWATER CONTOUR MAP 4Q2025

JOLIET #29 GENERATING STATION
JOLIET, ILLINOIS

Scale: 1" = 125'

Date: January 13, 2026

KPRG Project No. 12313.0

ATTACHMENT 1

ATTACHMENT 2
Analytical Data Packages

ANALYTICAL REPORT

PREPARED FOR

Attn: James Thorne
Midwest Generation EME LLC
1800 Channahon Road
Joliet, Illinois 60436

Generated 2/12/2025 8:36:35 AM

JOB DESCRIPTION

Joliet #29 CCR

JOB NUMBER

500-263294-1

Eurofins Chicago

Job Notes

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Authorization



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Case Narrative

Client: Midwest Generation EME LLC
Project: Joliet #29 CCR

Job ID: 500-263294-1

Job ID: 500-263294-1

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Job Narrative 500-263294-1

Receipt

The samples were received on 1/30/2025 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were -0.8°C and -0.7°C.

Metals

Method 6020B - Total Recoverable: The initial low level calibration verification (ICVL) result for batch 500-805187 was above the upper control limit. The affected analytes are: Beryllium. Sample results were non-detects, and have been reported as qualified data.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Method Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-263294-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CHI
7470A	Mercury (CVAA)	SW846	EET CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CHI
SM 4500 Cl- E	Chloride, Total	SM	EET CHI
SM 4500 F C	Fluoride	SM	EET CHI
SM 4500 SO4 E	Sulfate, Total	SM	EET CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CHI
7470A	Preparation, Mercury	SW846	EET CHI

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-263294-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-263294-1	MW-03	Water	01/29/25 11:08	01/30/25 10:00
500-263294-2	MW-04	Water	01/29/25 12:16	01/30/25 10:00
500-263294-3	MW-05	Water	01/29/25 13:49	01/30/25 10:00
500-263294-4	MW-10	Water	01/29/25 15:12	01/30/25 10:00
500-263294-5	Duplicate	Water	01/29/25 00:00	01/30/25 10:00

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-263294-1

Client Sample ID: MW-03

Lab Sample ID: 500-263294-1

Date Collected: 01/29/25 11:08

Matrix: Water

Date Received: 01/30/25 10:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	F1 F2	0.0030		mg/L		01/31/25 08:24	02/03/25 14:53	1
Arsenic	0.0014	F1 F2	0.0010		mg/L		01/31/25 08:24	02/03/25 14:53	1
Barium	0.12	F1 F2	0.0025		mg/L		01/31/25 08:24	02/03/25 14:53	1
Beryllium	<0.0010	^1+ F1 F2	0.0010		mg/L		01/31/25 08:24	02/03/25 14:53	1
Boron	0.37	F1 F2	0.050		mg/L		01/31/25 08:24	02/03/25 14:53	1
Cadmium	<0.00050	F1 F2	0.00050		mg/L		01/31/25 08:24	02/03/25 14:53	1
Calcium	130	F2	0.20		mg/L		01/31/25 08:24	02/03/25 14:53	1
Chromium	<0.0050	F1 F2	0.0050		mg/L		01/31/25 08:24	02/03/25 14:53	1
Cobalt	<0.0010	F1 F2	0.0010		mg/L		01/31/25 08:24	02/03/25 14:53	1
Lead	<0.00050	F1 F2	0.00050		mg/L		01/31/25 08:24	02/03/25 14:53	1
Lithium	0.013	F1 F2	0.010		mg/L		01/31/25 08:24	02/03/25 14:53	1
Molybdenum	0.0055	F1 F2	0.0050		mg/L		01/31/25 08:24	02/03/25 14:53	1
Selenium	<0.0025	F1 F2	0.0025		mg/L		01/31/25 08:24	02/03/25 14:53	1
Thallium	<0.0020	F1 F2	0.0020		mg/L		01/31/25 08:24	02/03/25 14:53	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/05/25 11:10	02/06/25 08:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1000		10		mg/L			01/31/25 05:53	1
Chloride (SM 4500 Cl- E)	230		10		mg/L			02/02/25 12:33	5
Fluoride (SM 4500 F C)	0.43		0.10		mg/L			01/31/25 14:14	1
Sulfate (SM 4500 SO4 E)	150		25		mg/L			02/04/25 12:14	5

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-263294-1

Client Sample ID: MW-04

Lab Sample ID: 500-263294-2

Date Collected: 01/29/25 12:16

Matrix: Water

Date Received: 01/30/25 10:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		01/31/25 08:24	02/03/25 15:12	1
Arsenic	0.0015		0.0010		mg/L		01/31/25 08:24	02/03/25 15:12	1
Barium	0.079		0.0025		mg/L		01/31/25 08:24	02/03/25 15:12	1
Beryllium	<0.0010	^1+	0.0010		mg/L		01/31/25 08:24	02/03/25 15:12	1
Boron	0.36		0.050		mg/L		01/31/25 08:24	02/03/25 15:12	1
Cadmium	<0.00050		0.00050		mg/L		01/31/25 08:24	02/03/25 15:12	1
Calcium	120		0.20		mg/L		01/31/25 08:24	02/03/25 15:12	1
Chromium	<0.0050		0.0050		mg/L		01/31/25 08:24	02/03/25 15:12	1
Cobalt	0.013		0.0010		mg/L		01/31/25 08:24	02/03/25 15:12	1
Lead	<0.00050		0.00050		mg/L		01/31/25 08:24	02/03/25 15:12	1
Lithium	0.013		0.010		mg/L		01/31/25 08:24	02/03/25 15:12	1
Molybdenum	0.0059		0.0050		mg/L		01/31/25 08:24	02/03/25 15:12	1
Selenium	<0.0025		0.0025		mg/L		01/31/25 08:24	02/03/25 15:12	1
Thallium	<0.0020		0.0020		mg/L		01/31/25 08:24	02/03/25 15:12	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/05/25 11:10	02/06/25 08:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	920		10		mg/L			01/31/25 05:56	1
Chloride (SM 4500 Cl- E)	210		10		mg/L			02/02/25 12:33	5
Fluoride (SM 4500 F C)	0.46		0.10		mg/L			01/31/25 14:28	1
Sulfate (SM 4500 SO4 E)	140		25		mg/L			02/04/25 12:14	5

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-263294-1

Client Sample ID: MW-05

Lab Sample ID: 500-263294-3

Date Collected: 01/29/25 13:49

Matrix: Water

Date Received: 01/30/25 10:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		01/31/25 08:24	02/03/25 15:15	1
Arsenic	0.0012		0.0010		mg/L		01/31/25 08:24	02/03/25 15:15	1
Barium	0.083		0.0025		mg/L		01/31/25 08:24	02/03/25 15:15	1
Beryllium	<0.0010	^1+	0.0010		mg/L		01/31/25 08:24	02/03/25 15:15	1
Boron	0.50		0.050		mg/L		01/31/25 08:24	02/03/25 15:15	1
Cadmium	<0.00050		0.00050		mg/L		01/31/25 08:24	02/03/25 15:15	1
Calcium	120		0.20		mg/L		01/31/25 08:24	02/03/25 15:15	1
Chromium	<0.0050		0.0050		mg/L		01/31/25 08:24	02/03/25 15:15	1
Cobalt	<0.0010		0.0010		mg/L		01/31/25 08:24	02/03/25 15:15	1
Lead	<0.00050		0.00050		mg/L		01/31/25 08:24	02/03/25 15:15	1
Lithium	0.018		0.010		mg/L		01/31/25 08:24	02/03/25 15:15	1
Molybdenum	<0.0050		0.0050		mg/L		01/31/25 08:24	02/03/25 15:15	1
Selenium	<0.0025		0.0025		mg/L		01/31/25 08:24	02/03/25 15:15	1
Thallium	<0.0020		0.0020		mg/L		01/31/25 08:24	02/03/25 15:15	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/05/25 11:10	02/06/25 08:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	920		10		mg/L			01/31/25 05:59	1
Chloride (SM 4500 Cl- E)	180		10		mg/L			02/02/25 12:34	5
Fluoride (SM 4500 F C)	0.34		0.10		mg/L			01/31/25 14:32	1
Sulfate (SM 4500 SO4 E)	170		25		mg/L			02/04/25 12:15	5

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-263294-1

Client Sample ID: MW-10

Lab Sample ID: 500-263294-4

Date Collected: 01/29/25 15:12

Matrix: Water

Date Received: 01/30/25 10:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		01/31/25 08:24	02/03/25 15:17	1
Arsenic	0.0011		0.0010		mg/L		01/31/25 08:24	02/03/25 15:17	1
Barium	0.055		0.0025		mg/L		01/31/25 08:24	02/03/25 15:17	1
Beryllium	<0.0010	^1+	0.0010		mg/L		01/31/25 08:24	02/03/25 15:17	1
Boron	0.50		0.050		mg/L		01/31/25 08:24	02/03/25 15:17	1
Cadmium	<0.00050		0.00050		mg/L		01/31/25 08:24	02/03/25 15:17	1
Calcium	140		0.20		mg/L		01/31/25 08:24	02/03/25 15:17	1
Chromium	<0.0050		0.0050		mg/L		01/31/25 08:24	02/03/25 15:17	1
Cobalt	<0.0010		0.0010		mg/L		01/31/25 08:24	02/03/25 15:17	1
Lead	0.00089		0.00050		mg/L		01/31/25 08:24	02/03/25 15:17	1
Lithium	0.015		0.010		mg/L		01/31/25 08:24	02/03/25 15:17	1
Molybdenum	0.0066		0.0050		mg/L		01/31/25 08:24	02/03/25 15:17	1
Selenium	<0.0025		0.0025		mg/L		01/31/25 08:24	02/03/25 15:17	1
Thallium	<0.0020		0.0020		mg/L		01/31/25 08:24	02/03/25 15:17	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/05/25 11:10	02/06/25 08:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1100		10		mg/L			01/31/25 06:01	1
Chloride (SM 4500 Cl- E)	250		20		mg/L			02/02/25 12:34	10
Fluoride (SM 4500 F C)	0.40		0.10		mg/L			01/31/25 14:37	1
Sulfate (SM 4500 SO4 E)	150		25		mg/L			02/04/25 12:13	5

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-263294-1

Client Sample ID: Duplicate

Lab Sample ID: 500-263294-5

Date Collected: 01/29/25 00:00

Matrix: Water

Date Received: 01/30/25 10:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		01/31/25 08:24	02/03/25 15:20	1
Arsenic	0.0014		0.0010		mg/L		01/31/25 08:24	02/03/25 15:20	1
Barium	0.12		0.0025		mg/L		01/31/25 08:24	02/03/25 15:20	1
Beryllium	<0.0010	^1+	0.0010		mg/L		01/31/25 08:24	02/03/25 15:20	1
Boron	0.36		0.050		mg/L		01/31/25 08:24	02/03/25 15:20	1
Cadmium	<0.00050		0.00050		mg/L		01/31/25 08:24	02/03/25 15:20	1
Calcium	130		0.20		mg/L		01/31/25 08:24	02/03/25 15:20	1
Chromium	<0.0050		0.0050		mg/L		01/31/25 08:24	02/03/25 15:20	1
Cobalt	<0.0010		0.0010		mg/L		01/31/25 08:24	02/03/25 15:20	1
Lead	<0.00050		0.00050		mg/L		01/31/25 08:24	02/03/25 15:20	1
Lithium	0.013		0.010		mg/L		01/31/25 08:24	02/03/25 15:20	1
Molybdenum	0.0050		0.0050		mg/L		01/31/25 08:24	02/03/25 15:20	1
Selenium	0.0028		0.0025		mg/L		01/31/25 08:24	02/03/25 15:20	1
Thallium	<0.0020		0.0020		mg/L		01/31/25 08:24	02/03/25 15:20	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/05/25 11:10	02/06/25 08:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1000		10		mg/L			01/31/25 06:04	1
Chloride (SM 4500 Cl- E)	220		10		mg/L			02/02/25 12:34	5
Fluoride (SM 4500 F C)	0.43		0.10		mg/L			01/31/25 14:41	1
Sulfate (SM 4500 SO4 E)	150		25		mg/L			02/04/25 12:12	5

Definitions/Glossary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-263294-1

Qualifiers

Metals

Qualifier	Qualifier Description
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-263294-1

Metals

Prep Batch: 804835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-263294-1	MW-03	Total Recoverable	Water	3005A	
500-263294-2	MW-04	Total Recoverable	Water	3005A	
500-263294-3	MW-05	Total Recoverable	Water	3005A	
500-263294-4	MW-10	Total Recoverable	Water	3005A	
500-263294-5	Duplicate	Total Recoverable	Water	3005A	
MB 500-804835/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-804835/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-263294-1 MS	MW-03	Total Recoverable	Water	3005A	
500-263294-1 MSD	MW-03	Total Recoverable	Water	3005A	
500-263294-1 DU	MW-03	Total Recoverable	Water	3005A	

Analysis Batch: 805187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-263294-1	MW-03	Total Recoverable	Water	6020B	804835
500-263294-2	MW-04	Total Recoverable	Water	6020B	804835
500-263294-3	MW-05	Total Recoverable	Water	6020B	804835
500-263294-4	MW-10	Total Recoverable	Water	6020B	804835
500-263294-5	Duplicate	Total Recoverable	Water	6020B	804835
MB 500-804835/1-A	Method Blank	Total Recoverable	Water	6020B	804835
LCS 500-804835/2-A	Lab Control Sample	Total Recoverable	Water	6020B	804835
500-263294-1 MS	MW-03	Total Recoverable	Water	6020B	804835
500-263294-1 MSD	MW-03	Total Recoverable	Water	6020B	804835
500-263294-1 DU	MW-03	Total Recoverable	Water	6020B	804835

Prep Batch: 805377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-263294-1	MW-03	Total/NA	Water	7470A	
500-263294-2	MW-04	Total/NA	Water	7470A	
500-263294-3	MW-05	Total/NA	Water	7470A	
500-263294-4	MW-10	Total/NA	Water	7470A	
500-263294-5	Duplicate	Total/NA	Water	7470A	
MB 500-805377/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-805377/13-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 805542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-263294-1	MW-03	Total/NA	Water	7470A	805377
500-263294-2	MW-04	Total/NA	Water	7470A	805377
500-263294-3	MW-05	Total/NA	Water	7470A	805377
500-263294-4	MW-10	Total/NA	Water	7470A	805377
500-263294-5	Duplicate	Total/NA	Water	7470A	805377
MB 500-805377/12-A	Method Blank	Total/NA	Water	7470A	805377
LCS 500-805377/13-A	Lab Control Sample	Total/NA	Water	7470A	805377

General Chemistry

Analysis Batch: 804801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-263294-1	MW-03	Total/NA	Water	SM 2540C	
500-263294-2	MW-04	Total/NA	Water	SM 2540C	
500-263294-3	MW-05	Total/NA	Water	SM 2540C	

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QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-263294-1

General Chemistry (Continued)

Analysis Batch: 804801 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-263294-4	MW-10	Total/NA	Water	SM 2540C	
500-263294-5	Duplicate	Total/NA	Water	SM 2540C	
MB 500-804801/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-804801/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 804986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-263294-1	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-263294-2	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-263294-3	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-263294-4	MW-10	Total/NA	Water	SM 4500 Cl- E	
500-263294-5	Duplicate	Total/NA	Water	SM 4500 Cl- E	
MB 500-804986/67	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-804986/68	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 805095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-263294-1	MW-03	Total/NA	Water	SM 4500 F C	
500-263294-2	MW-04	Total/NA	Water	SM 4500 F C	
500-263294-3	MW-05	Total/NA	Water	SM 4500 F C	
500-263294-4	MW-10	Total/NA	Water	SM 4500 F C	
500-263294-5	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-805095/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-805095/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-263294-1 MS	MW-03	Total/NA	Water	SM 4500 F C	
500-263294-1 MSD	MW-03	Total/NA	Water	SM 4500 F C	

Analysis Batch: 805302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-263294-1	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-263294-2	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-263294-3	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-263294-4	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-263294-5	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-805302/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-805302/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-263294-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-804835/1-A
Matrix: Water
Analysis Batch: 805187

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 804835

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		01/31/25 08:24	02/03/25 14:48	1
Arsenic	<0.0010		0.0010		mg/L		01/31/25 08:24	02/03/25 14:48	1
Barium	<0.0025		0.0025		mg/L		01/31/25 08:24	02/03/25 14:48	1
Beryllium	<0.0010	^1+	0.0010		mg/L		01/31/25 08:24	02/03/25 14:48	1
Boron	<0.050		0.050		mg/L		01/31/25 08:24	02/03/25 14:48	1
Cadmium	<0.00050		0.00050		mg/L		01/31/25 08:24	02/03/25 14:48	1
Calcium	<0.20		0.20		mg/L		01/31/25 08:24	02/03/25 14:48	1
Chromium	<0.0050		0.0050		mg/L		01/31/25 08:24	02/03/25 14:48	1
Cobalt	<0.0010		0.0010		mg/L		01/31/25 08:24	02/03/25 14:48	1
Lead	<0.00050		0.00050		mg/L		01/31/25 08:24	02/03/25 14:48	1
Lithium	<0.010		0.010		mg/L		01/31/25 08:24	02/03/25 14:48	1
Molybdenum	<0.0050		0.0050		mg/L		01/31/25 08:24	02/03/25 14:48	1
Selenium	<0.0025		0.0025		mg/L		01/31/25 08:24	02/03/25 14:48	1
Thallium	<0.0020		0.0020		mg/L		01/31/25 08:24	02/03/25 14:48	1

Lab Sample ID: LCS 500-804835/2-A
Matrix: Water
Analysis Batch: 805187

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 804835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.500	0.529		mg/L		106	80 - 120
Arsenic	0.100	0.100		mg/L		100	80 - 120
Barium	0.500	0.510		mg/L		102	80 - 120
Beryllium	0.0500	0.0527	^1+	mg/L		105	80 - 120
Boron	1.00	1.04		mg/L		104	80 - 120
Cadmium	0.0500	0.0520		mg/L		104	80 - 120
Calcium	10.0	9.31		mg/L		93	80 - 120
Chromium	0.200	0.209		mg/L		105	80 - 120
Cobalt	0.500	0.526		mg/L		105	80 - 120
Lead	0.100	0.104		mg/L		104	80 - 120
Lithium	0.100	0.109		mg/L		109	80 - 120
Molybdenum	1.00	1.01		mg/L		101	80 - 120
Selenium	0.100	0.0991		mg/L		99	80 - 120
Thallium	0.100	0.108		mg/L		108	80 - 120

Lab Sample ID: 500-263294-1 MS
Matrix: Water
Analysis Batch: 805187

Client Sample ID: MW-03
Prep Type: Total Recoverable
Prep Batch: 804835

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.0030	F1 F2	0.500	0.561		mg/L		112	75 - 125
Arsenic	0.0014	F1 F2	0.100	0.108		mg/L		107	75 - 125
Barium	0.12	F1 F2	0.500	0.678		mg/L		112	75 - 125
Beryllium	<0.0010	^1+ F1 F2	0.0500	0.0527	^1+	mg/L		105	75 - 125
Boron	0.37	F1 F2	1.00	1.42		mg/L		105	75 - 125
Cadmium	<0.00050	F1 F2	0.0500	0.0531		mg/L		106	75 - 125
Calcium	130	F2	10.0	140	4	mg/L		143	75 - 125
Chromium	<0.0050	F1 F2	0.200	0.212		mg/L		105	75 - 125
Cobalt	<0.0010	F1 F2	0.500	0.544		mg/L		109	75 - 125

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QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-263294-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-263294-1 MS

Matrix: Water

Analysis Batch: 805187

Client Sample ID: MW-03

Prep Type: Total Recoverable

Prep Batch: 804835

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	<0.00050	F1 F2	0.100	0.109		mg/L		109	75 - 125
Lithium	0.013	F1 F2	0.100	0.120		mg/L		107	75 - 125
Molybdenum	0.0055	F1 F2	1.00	1.09		mg/L		108	75 - 125
Selenium	<0.0025	F1 F2	0.100	0.109		mg/L		106	75 - 125
Thallium	<0.0020	F1 F2	0.100	0.111		mg/L		111	75 - 125

Lab Sample ID: 500-263294-1 MSD

Matrix: Water

Analysis Batch: 805187

Client Sample ID: MW-03

Prep Type: Total Recoverable

Prep Batch: 804835

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.0030	F1 F2	0.500	0.734	F1 F2	mg/L		147	75 - 125	27	20
Arsenic	0.0014	F1 F2	0.100	0.142	F1 F2	mg/L		141	75 - 125	27	20
Barium	0.12	F1 F2	0.500	0.887	F1 F2	mg/L		153	75 - 125	27	20
Beryllium	<0.0010	^1+ F1 F2	0.0500	0.0693	F1 F2 ^1+	mg/L		139	75 - 125	27	20
Boron	0.37	F1 F2	1.00	1.88	F1 F2	mg/L		151	75 - 125	28	20
Cadmium	<0.00050	F1 F2	0.0500	0.0701	F1 F2	mg/L		140	75 - 125	28	20
Calcium	130	F2	10.0	183	4 F2	mg/L		578	75 - 125	27	20
Chromium	<0.0050	F1 F2	0.200	0.278	F1 F2	mg/L		138	75 - 125	27	20
Cobalt	<0.0010	F1 F2	0.500	0.708	F1 F2	mg/L		142	75 - 125	26	20
Lead	<0.00050	F1 F2	0.100	0.142	F1 F2	mg/L		142	75 - 125	27	20
Lithium	0.013	F1 F2	0.100	0.157	F1 F2	mg/L		144	75 - 125	27	20
Molybdenum	0.0055	F1 F2	1.00	1.43	F1 F2	mg/L		143	75 - 125	28	20
Selenium	<0.0025	F1 F2	0.100	0.140	F1 F2	mg/L		138	75 - 125	25	20
Thallium	<0.0020	F1 F2	0.100	0.145	F1 F2	mg/L		145	75 - 125	26	20

Lab Sample ID: 500-263294-1 DU

Matrix: Water

Analysis Batch: 805187

Client Sample ID: MW-03

Prep Type: Total Recoverable

Prep Batch: 804835

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.0030	F1 F2	<0.0030		mg/L		NC	20
Arsenic	0.0014	F1 F2	0.00141		mg/L		0.2	20
Barium	0.12	F1 F2	0.119		mg/L		0.8	20
Beryllium	<0.0010	^1+ F1 F2	<0.0010	^1+	mg/L		NC	20
Boron	0.37	F1 F2	0.368		mg/L		0.6	20
Cadmium	<0.00050	F1 F2	<0.00050		mg/L		NC	20
Calcium	130	F2	128		mg/L		2	20
Chromium	<0.0050	F1 F2	<0.0050		mg/L		NC	20
Cobalt	<0.0010	F1 F2	<0.0010		mg/L		NC	20
Lead	<0.00050	F1 F2	<0.00050		mg/L		NC	20
Lithium	0.013	F1 F2	0.0128		mg/L		0.5	20
Molybdenum	0.0055	F1 F2	0.00510		mg/L		7	20
Selenium	<0.0025	F1 F2	0.00296		mg/L		NC	20
Thallium	<0.0020	F1 F2	<0.0020		mg/L		NC	20

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QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-263294-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-805377/12-A
Matrix: Water
Analysis Batch: 805542

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 805377

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/05/25 11:10	02/06/25 08:05	1

Lab Sample ID: LCS 500-805377/13-A
Matrix: Water
Analysis Batch: 805542

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 805377

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00200	0.00203		mg/L		102	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-804801/1
Matrix: Water
Analysis Batch: 804801

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			01/31/25 05:31	1

Lab Sample ID: LCS 500-804801/2
Matrix: Water
Analysis Batch: 804801

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	254		mg/L		102	80 - 120

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-804986/67
Matrix: Water
Analysis Batch: 804986

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			02/02/25 12:08	1

Lab Sample ID: LCS 500-804986/68
Matrix: Water
Analysis Batch: 804986

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	19.6		mg/L		98	85 - 115

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-805095/31
Matrix: Water
Analysis Batch: 805095

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			01/31/25 13:34	1

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QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-263294-1

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 500-805095/32

Matrix: Water

Analysis Batch: 805095

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Fluoride			10.0	9.94		mg/L		99	90 - 119		

Lab Sample ID: 500-263294-1 MS

Matrix: Water

Analysis Batch: 805095

Client Sample ID: MW-03

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Fluoride	0.43		5.00	5.65		mg/L		104	75 - 125		

Lab Sample ID: 500-263294-1 MSD

Matrix: Water

Analysis Batch: 805095

Client Sample ID: MW-03

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.43		5.00	5.70		mg/L		105	75 - 125	1	20

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-805302/16

Matrix: Water

Analysis Batch: 805302

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			02/04/25 11:12	1

Lab Sample ID: LCS 500-805302/17

Matrix: Water

Analysis Batch: 805302

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfate			20.0	20.8		mg/L		104	88 - 123		

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Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-263294-1

Login Number: 263294

List Source: Eurofins Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	-0.8,-0.7 samples not frozen
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

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Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-263294-1

Client Sample ID: MW-03

Date Collected: 01/29/25 11:08

Date Received: 01/30/25 10:00

Lab Sample ID: 500-263294-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			804835	BDE	EET CHI	01/31/25 08:24 - 01/31/25 14:24 ¹
Total Recoverable	Analysis	6020B		1	805187	RN	EET CHI	02/03/25 14:53
Total/NA	Prep	7470A			805377	MJG	EET CHI	02/05/25 11:10 - 02/05/25 13:10 ¹
Total/NA	Analysis	7470A		1	805542	MJG	EET CHI	02/06/25 08:09
Total/NA	Analysis	SM 2540C		1	804801	CLB	EET CHI	01/31/25 05:53
Total/NA	Analysis	SM 4500 CI- E		5	804986	TR	EET CHI	02/02/25 12:33
Total/NA	Analysis	SM 4500 F C		1	805095	SO	EET CHI	01/31/25 14:14
Total/NA	Analysis	SM 4500 SO4 E		5	805302	TR	EET CHI	02/04/25 12:14

Client Sample ID: MW-04

Date Collected: 01/29/25 12:16

Date Received: 01/30/25 10:00

Lab Sample ID: 500-263294-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			804835	BDE	EET CHI	01/31/25 08:24 - 01/31/25 14:24 ¹
Total Recoverable	Analysis	6020B		1	805187	RN	EET CHI	02/03/25 15:12
Total/NA	Prep	7470A			805377	MJG	EET CHI	02/05/25 11:10 - 02/05/25 13:10 ¹
Total/NA	Analysis	7470A		1	805542	MJG	EET CHI	02/06/25 08:12
Total/NA	Analysis	SM 2540C		1	804801	CLB	EET CHI	01/31/25 05:56
Total/NA	Analysis	SM 4500 CI- E		5	804986	TR	EET CHI	02/02/25 12:33
Total/NA	Analysis	SM 4500 F C		1	805095	SO	EET CHI	01/31/25 14:28
Total/NA	Analysis	SM 4500 SO4 E		5	805302	TR	EET CHI	02/04/25 12:14

Client Sample ID: MW-05

Date Collected: 01/29/25 13:49

Date Received: 01/30/25 10:00

Lab Sample ID: 500-263294-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			804835	BDE	EET CHI	01/31/25 08:24 - 01/31/25 14:24 ¹
Total Recoverable	Analysis	6020B		1	805187	RN	EET CHI	02/03/25 15:15
Total/NA	Prep	7470A			805377	MJG	EET CHI	02/05/25 11:10 - 02/05/25 13:10 ¹
Total/NA	Analysis	7470A		1	805542	MJG	EET CHI	02/06/25 08:14
Total/NA	Analysis	SM 2540C		1	804801	CLB	EET CHI	01/31/25 05:59
Total/NA	Analysis	SM 4500 CI- E		5	804986	TR	EET CHI	02/02/25 12:34
Total/NA	Analysis	SM 4500 F C		1	805095	SO	EET CHI	01/31/25 14:32
Total/NA	Analysis	SM 4500 SO4 E		5	805302	TR	EET CHI	02/04/25 12:15

Client Sample ID: MW-10

Date Collected: 01/29/25 15:12

Date Received: 01/30/25 10:00

Lab Sample ID: 500-263294-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			804835	BDE	EET CHI	01/31/25 08:24 - 01/31/25 14:24 ¹
Total Recoverable	Analysis	6020B		1	805187	RN	EET CHI	02/03/25 15:17

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Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-263294-1

Client Sample ID: MW-10

Date Collected: 01/29/25 15:12

Date Received: 01/30/25 10:00

Lab Sample ID: 500-263294-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			805377	MJG	EET CHI	02/05/25 11:10 - 02/05/25 13:10 ¹
Total/NA	Analysis	7470A		1	805542	MJG	EET CHI	02/06/25 08:16
Total/NA	Analysis	SM 2540C		1	804801	CLB	EET CHI	01/31/25 06:01
Total/NA	Analysis	SM 4500 Cl- E		10	804986	TR	EET CHI	02/02/25 12:34
Total/NA	Analysis	SM 4500 F C		1	805095	SO	EET CHI	01/31/25 14:37
Total/NA	Analysis	SM 4500 SO4 E		5	805302	TR	EET CHI	02/04/25 12:13

Client Sample ID: Duplicate

Date Collected: 01/29/25 00:00

Date Received: 01/30/25 10:00

Lab Sample ID: 500-263294-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			804835	BDE	EET CHI	01/31/25 08:24 - 01/31/25 14:24 ¹
Total Recoverable	Analysis	6020B		1	805187	RN	EET CHI	02/03/25 15:20
Total/NA	Prep	7470A			805377	MJG	EET CHI	02/05/25 11:10 - 02/05/25 13:10 ¹
Total/NA	Analysis	7470A		1	805542	MJG	EET CHI	02/06/25 08:18
Total/NA	Analysis	SM 2540C		1	804801	CLB	EET CHI	01/31/25 06:04
Total/NA	Analysis	SM 4500 Cl- E		5	804986	TR	EET CHI	02/02/25 12:34
Total/NA	Analysis	SM 4500 F C		1	805095	SO	EET CHI	01/31/25 14:41
Total/NA	Analysis	SM 4500 SO4 E		5	805302	TR	EET CHI	02/04/25 12:12

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

ANALYTICAL REPORT

PREPARED FOR

Attn: James Thorne
Midwest Generation EME LLC
1800 Channahon Road
Joliet, Illinois 60436

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JOB DESCRIPTION

Joliet #29 CCR (RAD)

JOB NUMBER

500-263294-2

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Job Notes

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Case Narrative

Client: Midwest Generation EME LLC
Project: Joliet #29 CCR (RAD)

Job ID: 500-263294-2

Job ID: 500-263294-2

Eurofins Chicago

Job Narrative 500-263294-2

Receipt

The samples were received on 1/30/2025 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were -0.8°C and -0.7°C.

Gas Flow Proportional Counter

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Method Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-263294-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-263294-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-263294-1	MW-03	Water	01/29/25 11:08	01/30/25 10:00
500-263294-2	MW-04	Water	01/29/25 12:16	01/30/25 10:00
500-263294-3	MW-05	Water	01/29/25 13:49	01/30/25 10:00
500-263294-4	MW-10	Water	01/29/25 15:12	01/30/25 10:00
500-263294-5	Duplicate	Water	01/29/25 00:00	01/30/25 10:00

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-263294-2

Client Sample ID: MW-03

Lab Sample ID: 500-263294-1

Date Collected: 01/29/25 11:08

Matrix: Water

Date Received: 01/30/25 10:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0969	U	0.104	0.104	1.00	0.168	pCi/L	02/03/25 07:55	02/25/25 08:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		30 - 110					02/03/25 07:55	02/25/25 08:27	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.440	U	0.334	0.336	1.00	0.507	pCi/L	02/03/25 07:58	02/19/25 12:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		30 - 110					02/03/25 07:58	02/19/25 12:02	1
Y Carrier	83.7		30 - 110					02/03/25 07:58	02/19/25 12:02	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.537		0.350	0.352	5.00	0.507	pCi/L		02/26/25 12:03	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-263294-2

Client Sample ID: MW-04

Lab Sample ID: 500-263294-2

Date Collected: 01/29/25 12:16

Matrix: Water

Date Received: 01/30/25 10:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.145		0.0974	0.0982	1.00	0.138	pCi/L	02/03/25 07:55	02/25/25 08:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.6		30 - 110					02/03/25 07:55	02/25/25 08:21	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.297	U	0.308	0.309	1.00	0.497	pCi/L	02/03/25 07:58	02/19/25 12:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.6		30 - 110					02/03/25 07:58	02/19/25 12:02	1
Y Carrier	88.6		30 - 110					02/03/25 07:58	02/19/25 12:02	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.442	U	0.323	0.324	5.00	0.497	pCi/L		02/26/25 12:03	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-263294-2

Client Sample ID: MW-05

Lab Sample ID: 500-263294-3

Date Collected: 01/29/25 13:49

Matrix: Water

Date Received: 01/30/25 10:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0736	U	0.0808	0.0810	1.00	0.130	pCi/L	02/03/25 07:55	02/25/25 08:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		30 - 110					02/03/25 07:55	02/25/25 08:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.181	U	0.402	0.402	1.00	0.701	pCi/L	02/03/25 07:58	02/19/25 13:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		30 - 110					02/03/25 07:58	02/19/25 13:53	1
Y Carrier	84.1		30 - 110					02/03/25 07:58	02/19/25 13:53	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.254	U	0.410	0.410	5.00	0.701	pCi/L		02/26/25 12:03	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-263294-2

Client Sample ID: MW-10

Lab Sample ID: 500-263294-4

Date Collected: 01/29/25 15:12

Matrix: Water

Date Received: 01/30/25 10:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0757	U	0.0829	0.0831	1.00	0.133	pCi/L	02/03/25 07:55	02/25/25 08:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.4		30 - 110					02/03/25 07:55	02/25/25 08:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.110	U	0.409	0.409	1.00	0.794	pCi/L	02/03/25 07:58	02/19/25 13:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.4		30 - 110					02/03/25 07:58	02/19/25 13:53	1
Y Carrier	82.6		30 - 110					02/03/25 07:58	02/19/25 13:53	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0345	U	0.417	0.417	5.00	0.794	pCi/L		02/26/25 12:03	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-263294-2

Client Sample ID: Duplicate

Lab Sample ID: 500-263294-5

Date Collected: 01/29/25 00:00

Matrix: Water

Date Received: 01/30/25 10:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.235		0.104	0.107	1.00	0.115	pCi/L	02/03/25 07:55	02/25/25 08:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.3		30 - 110					02/03/25 07:55	02/25/25 08:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.267	U	0.381	0.382	1.00	0.644	pCi/L	02/03/25 07:58	02/19/25 13:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.3		30 - 110					02/03/25 07:58	02/19/25 13:53	1
Y Carrier	84.9		30 - 110					02/03/25 07:58	02/19/25 13:53	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.502	U	0.395	0.397	5.00	0.644	pCi/L		02/26/25 12:03	1

Definitions/Glossary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-263294-2

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-263294-2

Rad

Prep Batch: 701117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-263294-1	MW-03	Total/NA	Water	PrecSep-21	
500-263294-2	MW-04	Total/NA	Water	PrecSep-21	
500-263294-3	MW-05	Total/NA	Water	PrecSep-21	
500-263294-4	MW-10	Total/NA	Water	PrecSep-21	
500-263294-5	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-701117/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-701117/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 701118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-263294-1	MW-03	Total/NA	Water	PrecSep_0	
500-263294-2	MW-04	Total/NA	Water	PrecSep_0	
500-263294-3	MW-05	Total/NA	Water	PrecSep_0	
500-263294-4	MW-10	Total/NA	Water	PrecSep_0	
500-263294-5	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-701118/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-701118/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-263294-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-701117/1-A
Matrix: Water
Analysis Batch: 704609

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 701117

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03474	U	0.0621	0.0622	1.00	0.111	pCi/L	02/03/25 07:55	02/25/25 08:11	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.3		30 - 110					02/03/25 07:55	02/25/25 08:11	1

Lab Sample ID: LCS 160-701117/2-A
Matrix: Water
Analysis Batch: 704609

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 701117

Analyte		Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226		9.58	8.204		0.904	1.00	0.121	pCi/L	86	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits							
Ba Carrier	97.4		30 - 110							

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-701118/1-A
Matrix: Water
Analysis Batch: 703819

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 701118

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4909	U	0.410	0.412	1.00	0.644	pCi/L	02/03/25 07:58	02/19/25 12:03	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.3		30 - 110					02/03/25 07:58	02/19/25 12:03	1
Y Carrier	81.1		30 - 110					02/03/25 07:58	02/19/25 12:03	1

Lab Sample ID: LCS 160-701118/2-A
Matrix: Water
Analysis Batch: 703864

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 701118

Analyte		Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228		8.08	8.596		1.23	1.00	0.625	pCi/L	106	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits							
Ba Carrier	97.4		30 - 110							
Y Carrier	77.8		30 - 110							

Eurofins Chicago

2417 Bond Street

University Park, IL 60484

Phone 708-534-5200 Fax 708-534-5211

Chain of Custody Record



Environment Testing

Client Information		Sampler <u>IAN JOHN HOWIESON</u>		Lab PM Mockler, Diana J		Carrier Tracking No(s)		COC No: 500-132931-45941 1																			
Client Contact: Patrick Allenstein		Phone <u>630 290 6850</u>		E-Mail Diana Mockler@et.eurofins.com		State of Origin		Page: Page 1 of 1																			
Company: KPRG and Associates, Inc		PWSID		Analysis Requested						Job # <u>500-263294</u>																	
Address 14665 West Lisbon Road, Suite 1A		Due Date Requested		Field Filtered Sample (Yes or No) Perform MSMSD (Yes or No) 6010C, 6020A, 7470A 2540C, 4500_F_C, SM4500_CLE, SM4500_S04_E 903.0, 904.0 Total Number of Containers						Preservation Codes D HNO3 N None																	
City Brookfield		TAT Requested (days)								Other																	
State Zip WI, 53005		Compliance Project ☐ Yes ☐ No																									
Phone 500-263294 COC		PO # 4502187984																									
Email patricka@kprginc.com		WO #																									
Project Name Joliet #29 CCR/ Event Desc Quarterly MWG Joliet #29 CCR		Project #: 50011568																									
Site: Illinois		SSOW#																									
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)							Special Instructions/Note:															
				Preservation Code:																							
1	MW-03	1-29-25	11:08	G	Water	N	N	X	X	X																	
2	MW-04	1-29-25	12:16	G	Water	N	N	X	X	X																	
3	MW-05	1-29-25	13:49	G	Water	N	N	X	X	X																	
4	MW-10	1-29-25	15:12	G	Water	N	N	X	X	X																	
5	Duplicate	1-29-25	—	G	Water	N	N	X	X	X																	
					Water																						
Possible Hazard Identification														Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)													
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological														☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months													
Deliverable Requested I, II, III, IV, Other (specify)														Special Instructions/QC Requirements													
Empty Kit Relinquished by														Method of Shipment:													
Relinquished by <u>[Signature]</u>														Received by <u>[Signature]</u>													
Date/Time <u>1-30-25 10:00</u>														Date/Time <u>1/30/25 1000</u>													
Company <u>KPRG</u>														Company <u>BRTA</u>													
Relinquished by														Received by													
Date/Time														Date/Time													
Company														Company													
Relinquished by														Received by													
Date/Time														Date/Time													
Company														Company													
Custody Seals Intact ☐ Yes ☐ No														Custody Seal No													
Cooler Temperature(s) °C and Other Remarks <u>-0.5 → -0.8, -0.4 → -0.7</u>																											

Chain of Custody Record

[illegible]

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-263294-2

Login Number: 263294

List Number: 1

Creator: Scott, Sherri L

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	-0.8,-0.7 samples not frozen
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Chicago

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-263294-2

Login Number: 263294

List Number: 2

Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis

List Creation: 01/31/25 01:51 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Chicago

Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-263294-2

Client Sample ID: MW-03

Date Collected: 01/29/25 11:08

Date Received: 01/30/25 10:00

Lab Sample ID: 500-263294-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			701117	OGC	EET SL	02/03/25 07:55
Total/NA	Analysis	903.0		1	704611	FLC	EET SL	02/25/25 08:27
Total/NA	Prep	PrecSep_0			701118	OGC	EET SL	02/03/25 07:58
Total/NA	Analysis	904.0		1	703864	FLC	EET SL	02/19/25 12:02
Total/NA	Analysis	Ra226_Ra228		1	704966	SCB	EET SL	02/26/25 12:03

Client Sample ID: MW-04

Date Collected: 01/29/25 12:16

Date Received: 01/30/25 10:00

Lab Sample ID: 500-263294-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			701117	OGC	EET SL	02/03/25 07:55
Total/NA	Analysis	903.0		1	704737	FLC	EET SL	02/25/25 08:21
Total/NA	Prep	PrecSep_0			701118	OGC	EET SL	02/03/25 07:58
Total/NA	Analysis	904.0		1	703864	FLC	EET SL	02/19/25 12:02
Total/NA	Analysis	Ra226_Ra228		1	704966	SCB	EET SL	02/26/25 12:03

Client Sample ID: MW-05

Date Collected: 01/29/25 13:49

Date Received: 01/30/25 10:00

Lab Sample ID: 500-263294-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			701117	OGC	EET SL	02/03/25 07:55
Total/NA	Analysis	903.0		1	704737	FLC	EET SL	02/25/25 08:22
Total/NA	Prep	PrecSep_0			701118	OGC	EET SL	02/03/25 07:58
Total/NA	Analysis	904.0		1	703864	FLC	EET SL	02/19/25 13:53
Total/NA	Analysis	Ra226_Ra228		1	704966	SCB	EET SL	02/26/25 12:03

Client Sample ID: MW-10

Date Collected: 01/29/25 15:12

Date Received: 01/30/25 10:00

Lab Sample ID: 500-263294-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			701117	OGC	EET SL	02/03/25 07:55
Total/NA	Analysis	903.0		1	704737	FLC	EET SL	02/25/25 08:22
Total/NA	Prep	PrecSep_0			701118	OGC	EET SL	02/03/25 07:58
Total/NA	Analysis	904.0		1	703864	FLC	EET SL	02/19/25 13:53
Total/NA	Analysis	Ra226_Ra228		1	704966	SCB	EET SL	02/26/25 12:03

Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-263294-2

Client Sample ID: Duplicate

Lab Sample ID: 500-263294-5

Date Collected: 01/29/25 00:00

Matrix: Water

Date Received: 01/30/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			701117	OGC	EET SL	02/03/25 07:55
Total/NA	Analysis	903.0		1	704737	FLC	EET SL	02/25/25 08:22
Total/NA	Prep	PrecSep_0			701118	OGC	EET SL	02/03/25 07:58
Total/NA	Analysis	904.0		1	703864	FLC	EET SL	02/19/25 13:53
Total/NA	Analysis	Ra226_Ra228		1	704966	SCB	EET SL	02/26/25 12:03

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Tracer/Carrier Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-263294-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)
500-263294-1	MW-03	93.4
500-263294-2	MW-04	91.6
500-263294-3	MW-05	91.8
500-263294-4	MW-10	81.4
500-263294-5	Duplicate	89.3
LCS 160-701117/2-A	Lab Control Sample	97.4
MB 160-701117/1-A	Method Blank	91.3

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
500-263294-1	MW-03	93.4	83.7
500-263294-2	MW-04	91.6	88.6
500-263294-3	MW-05	91.8	84.1
500-263294-4	MW-10	81.4	82.6
500-263294-5	Duplicate	89.3	84.9
LCS 160-701118/2-A	Lab Control Sample	97.4	77.8
MB 160-701118/1-A	Method Blank	91.3	81.1

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

ANALYTICAL REPORT

PREPARED FOR

Attn: James Thorne
Midwest Generation EME LLC
1800 Channahon Road
Joliet, Illinois 60436

Generated 5/14/2025 11:42:29 AM

JOB DESCRIPTION

Joliet #29 CCR

JOB NUMBER

500-267585-1

Eurofins Chicago

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Authorization



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Authorized for release by
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Case Narrative

Client: Midwest Generation EME LLC
Project: Joliet #29 CCR

Job ID: 500-267585-1

Job ID: 500-267585-1

Eurofins Chicago

Job Narrative 500-267585-1

Receipt

The samples were received on 4/30/2025 4:15 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.0°C and 4.4°C.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Chicago

Method Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-267585-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CHI
7470A	Mercury (CVAA)	SW846	EET CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CHI
SM 4500 Cl- E	Chloride, Total	SM	EET CHI
SM 4500 F C	Fluoride	SM	EET CHI
SM 4500 SO4 E	Sulfate, Total	SM	EET CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CHI
7470A	Preparation, Mercury	SW846	EET CHI

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200

Sample Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-267585-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-267585-1	MW-03	Water	04/30/25 09:13	04/30/25 16:15
500-267585-2	MW-04	Water	04/30/25 10:10	04/30/25 16:15
500-267585-3	MW-05	Water	04/30/25 13:06	04/30/25 16:15
500-267585-4	MW-10	Water	04/30/25 14:33	04/30/25 16:15
500-267585-5	Duplicate	Water	04/30/25 00:00	04/30/25 16:15

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-267585-1

Client Sample ID: MW-03

Lab Sample ID: 500-267585-1

Date Collected: 04/30/25 09:13

Matrix: Water

Date Received: 04/30/25 16:15

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/08/25 16:11	05/09/25 15:02	1
Arsenic	0.0013		0.0010		mg/L		05/08/25 16:11	05/09/25 15:02	1
Barium	0.12		0.0025		mg/L		05/08/25 16:11	05/09/25 15:02	1
Beryllium	<0.0010		0.0010		mg/L		05/08/25 16:11	05/09/25 15:02	1
Boron	0.44		0.050		mg/L		05/08/25 16:11	05/12/25 15:15	1
Cadmium	<0.00050		0.00050		mg/L		05/08/25 16:11	05/09/25 15:02	1
Calcium	130		0.20		mg/L		05/08/25 16:11	05/09/25 15:02	1
Chromium	<0.0050		0.0050		mg/L		05/08/25 16:11	05/09/25 15:02	1
Cobalt	<0.0010		0.0010		mg/L		05/08/25 16:11	05/09/25 15:02	1
Lead	<0.00050		0.00050		mg/L		05/08/25 16:11	05/09/25 15:02	1
Lithium	0.013		0.010		mg/L		05/08/25 16:11	05/09/25 15:02	1
Molybdenum	<0.0050		0.0050		mg/L		05/08/25 16:11	05/09/25 15:02	1
Selenium	<0.0025		0.0025		mg/L		05/08/25 16:11	05/09/25 15:02	1
Thallium	<0.0020		0.0020		mg/L		05/08/25 16:11	05/09/25 15:02	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/07/25 09:50	05/08/25 10:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1000		10		mg/L			05/07/25 00:26	1
Chloride (SM 4500 Cl- E)	280		20		mg/L			05/11/25 11:08	10
Fluoride (SM 4500 F C)	0.40		0.10		mg/L			05/10/25 13:34	1
Sulfate (SM 4500 SO4 E)	160		25		mg/L			05/06/25 15:48	5

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-267585-1

Client Sample ID: MW-04

Lab Sample ID: 500-267585-2

Date Collected: 04/30/25 10:10

Matrix: Water

Date Received: 04/30/25 16:15

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/08/25 16:15	05/12/25 15:49	1
Arsenic	0.0012		0.0010		mg/L		05/08/25 16:15	05/12/25 15:49	1
Barium	0.091		0.0025		mg/L		05/08/25 16:15	05/12/25 15:49	1
Beryllium	<0.0010		0.0010		mg/L		05/08/25 16:15	05/12/25 15:49	1
Boron	0.35		0.050		mg/L		05/08/25 16:15	05/12/25 15:49	1
Cadmium	<0.00050		0.00050		mg/L		05/08/25 16:15	05/12/25 15:49	1
Calcium	130		0.20		mg/L		05/08/25 16:15	05/12/25 15:49	1
Chromium	<0.0050		0.0050		mg/L		05/08/25 16:15	05/12/25 15:49	1
Cobalt	0.0079		0.0010		mg/L		05/08/25 16:15	05/12/25 15:49	1
Lead	<0.00050		0.00050		mg/L		05/08/25 16:15	05/12/25 15:49	1
Lithium	0.012		0.010		mg/L		05/08/25 16:15	05/12/25 15:49	1
Molybdenum	0.0050		0.0050		mg/L		05/08/25 16:15	05/12/25 15:49	1
Selenium	<0.0025		0.0025		mg/L		05/08/25 16:15	05/12/25 15:49	1
Thallium	<0.0020		0.0020		mg/L		05/08/25 16:15	05/12/25 15:49	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/07/25 09:50	05/08/25 10:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1000		10		mg/L			05/07/25 00:33	1
Chloride (SM 4500 Cl- E)	290		20		mg/L			05/11/25 11:08	10
Fluoride (SM 4500 F C)	0.39		0.10		mg/L			05/10/25 13:38	1
Sulfate (SM 4500 SO4 E)	160		25		mg/L			05/06/25 15:48	5

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-267585-1

Client Sample ID: MW-05

Lab Sample ID: 500-267585-3

Date Collected: 04/30/25 13:06

Matrix: Water

Date Received: 04/30/25 16:15

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/08/25 16:15	05/12/25 15:51	1
Arsenic	<0.0010		0.0010		mg/L		05/08/25 16:15	05/12/25 15:51	1
Barium	0.098		0.0025		mg/L		05/08/25 16:15	05/12/25 15:51	1
Beryllium	<0.0010		0.0010		mg/L		05/08/25 16:15	05/12/25 15:51	1
Boron	0.53		0.050		mg/L		05/08/25 16:15	05/12/25 15:51	1
Cadmium	<0.00050		0.00050		mg/L		05/08/25 16:15	05/12/25 15:51	1
Calcium	130		0.20		mg/L		05/08/25 16:15	05/12/25 15:51	1
Chromium	<0.0050		0.0050		mg/L		05/08/25 16:15	05/12/25 15:51	1
Cobalt	<0.0010		0.0010		mg/L		05/08/25 16:15	05/12/25 15:51	1
Lead	<0.00050		0.00050		mg/L		05/08/25 16:15	05/12/25 15:51	1
Lithium	0.017		0.010		mg/L		05/08/25 16:15	05/12/25 15:51	1
Molybdenum	<0.0050		0.0050		mg/L		05/08/25 16:15	05/12/25 15:51	1
Selenium	<0.0025		0.0025		mg/L		05/08/25 16:15	05/12/25 15:51	1
Thallium	<0.0020		0.0020		mg/L		05/08/25 16:15	05/12/25 15:51	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/07/25 09:50	05/08/25 10:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1300		10		mg/L			05/07/25 00:39	1
Chloride (SM 4500 Cl- E)	370		20		mg/L			05/11/25 11:08	10
Fluoride (SM 4500 F C)	0.32		0.10		mg/L			05/10/25 13:50	1
Sulfate (SM 4500 SO4 E)	210		25		mg/L			05/06/25 15:49	5

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-267585-1

Client Sample ID: MW-10

Lab Sample ID: 500-267585-4

Date Collected: 04/30/25 14:33

Matrix: Water

Date Received: 04/30/25 16:15

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/08/25 16:15	05/12/25 15:54	1
Arsenic	<0.0010		0.0010		mg/L		05/08/25 16:15	05/12/25 15:54	1
Barium	0.053		0.0025		mg/L		05/08/25 16:15	05/12/25 15:54	1
Beryllium	<0.0010		0.0010		mg/L		05/08/25 16:15	05/12/25 15:54	1
Boron	0.38		0.050		mg/L		05/08/25 16:15	05/12/25 15:54	1
Cadmium	<0.00050		0.00050		mg/L		05/08/25 16:15	05/12/25 15:54	1
Calcium	120		0.20		mg/L		05/08/25 16:15	05/12/25 15:54	1
Chromium	<0.0050		0.0050		mg/L		05/08/25 16:15	05/12/25 15:54	1
Cobalt	<0.0010		0.0010		mg/L		05/08/25 16:15	05/12/25 15:54	1
Lead	<0.00050		0.00050		mg/L		05/08/25 16:15	05/12/25 15:54	1
Lithium	0.013		0.010		mg/L		05/08/25 16:15	05/12/25 15:54	1
Molybdenum	0.0068		0.0050		mg/L		05/08/25 16:15	05/12/25 15:54	1
Selenium	<0.0025		0.0025		mg/L		05/08/25 16:15	05/12/25 15:54	1
Thallium	<0.0020		0.0020		mg/L		05/08/25 16:15	05/12/25 15:54	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/07/25 09:50	05/08/25 11:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1100		10		mg/L			05/07/25 00:41	1
Chloride (SM 4500 Cl- E)	280		20		mg/L			05/11/25 11:09	10
Fluoride (SM 4500 F C)	0.42		0.10		mg/L			05/10/25 13:57	1
Sulfate (SM 4500 SO4 E)	170		25		mg/L			05/06/25 15:49	5

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-267585-1

Client Sample ID: Duplicate

Lab Sample ID: 500-267585-5

Date Collected: 04/30/25 00:00

Matrix: Water

Date Received: 04/30/25 16:15

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/08/25 16:15	05/12/25 16:01	1
Arsenic	0.0012		0.0010		mg/L		05/08/25 16:15	05/12/25 16:01	1
Barium	0.092		0.0025		mg/L		05/08/25 16:15	05/12/25 16:01	1
Beryllium	<0.0010		0.0010		mg/L		05/08/25 16:15	05/12/25 16:01	1
Boron	0.35		0.050		mg/L		05/08/25 16:15	05/12/25 16:01	1
Cadmium	<0.00050		0.00050		mg/L		05/08/25 16:15	05/12/25 16:01	1
Calcium	130		0.20		mg/L		05/08/25 16:15	05/12/25 16:01	1
Chromium	<0.0050		0.0050		mg/L		05/08/25 16:15	05/12/25 16:01	1
Cobalt	0.0081		0.0010		mg/L		05/08/25 16:15	05/12/25 16:01	1
Lead	<0.00050		0.00050		mg/L		05/08/25 16:15	05/12/25 16:01	1
Lithium	0.013		0.010		mg/L		05/08/25 16:15	05/12/25 16:01	1
Molybdenum	<0.0050		0.0050		mg/L		05/08/25 16:15	05/12/25 16:01	1
Selenium	<0.0025		0.0025		mg/L		05/08/25 16:15	05/12/25 16:01	1
Thallium	<0.0020		0.0020		mg/L		05/08/25 16:15	05/12/25 16:01	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/07/25 09:50	05/08/25 11:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1000		10		mg/L			05/07/25 00:44	1
Chloride (SM 4500 Cl- E)	290		20		mg/L			05/11/25 11:09	10
Fluoride (SM 4500 F C)	0.38		0.10		mg/L			05/10/25 13:59	1
Sulfate (SM 4500 SO4 E)	160		25		mg/L			05/06/25 15:49	5

Definitions/Glossary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-267585-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-267585-1

Metals

Prep Batch: 816622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-267585-1	MW-03	Total/NA	Water	7470A	
500-267585-2	MW-04	Total/NA	Water	7470A	
500-267585-3	MW-05	Total/NA	Water	7470A	
500-267585-4	MW-10	Total/NA	Water	7470A	
500-267585-5	Duplicate	Total/NA	Water	7470A	
MB 500-816622/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-816622/13-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 816904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-267585-1	MW-03	Total/NA	Water	7470A	816622
500-267585-2	MW-04	Total/NA	Water	7470A	816622
500-267585-3	MW-05	Total/NA	Water	7470A	816622
500-267585-4	MW-10	Total/NA	Water	7470A	816622
500-267585-5	Duplicate	Total/NA	Water	7470A	816622
MB 500-816622/12-A	Method Blank	Total/NA	Water	7470A	816622
LCS 500-816622/13-A	Lab Control Sample	Total/NA	Water	7470A	816622

Prep Batch: 816972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-267585-1	MW-03	Total Recoverable	Water	3005A	
MB 500-816972/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-816972/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 816974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-267585-2	MW-04	Total Recoverable	Water	3005A	
500-267585-3	MW-05	Total Recoverable	Water	3005A	
500-267585-4	MW-10	Total Recoverable	Water	3005A	
500-267585-5	Duplicate	Total Recoverable	Water	3005A	
MB 500-816974/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-816974/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 817255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-267585-1	MW-03	Total Recoverable	Water	6020B	816972
MB 500-816972/1-A	Method Blank	Total Recoverable	Water	6020B	816972
LCS 500-816972/2-A	Lab Control Sample	Total Recoverable	Water	6020B	816972

Analysis Batch: 817410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-267585-1	MW-03	Total Recoverable	Water	6020B	816972
500-267585-2	MW-04	Total Recoverable	Water	6020B	816974
500-267585-3	MW-05	Total Recoverable	Water	6020B	816974
500-267585-4	MW-10	Total Recoverable	Water	6020B	816974
500-267585-5	Duplicate	Total Recoverable	Water	6020B	816974
MB 500-816972/1-A	Method Blank	Total Recoverable	Water	6020B	816972
MB 500-816974/1-A	Method Blank	Total Recoverable	Water	6020B	816974
LCS 500-816972/2-A	Lab Control Sample	Total Recoverable	Water	6020B	816972
LCS 500-816974/2-A	Lab Control Sample	Total Recoverable	Water	6020B	816974

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QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-267585-1

General Chemistry

Analysis Batch: 816626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-267585-1	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-267585-2	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-267585-3	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-267585-4	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-267585-5	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-816626/61	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-816626/62	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 816630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-267585-1	MW-03	Total/NA	Water	SM 2540C	
500-267585-2	MW-04	Total/NA	Water	SM 2540C	
500-267585-3	MW-05	Total/NA	Water	SM 2540C	
500-267585-4	MW-10	Total/NA	Water	SM 2540C	
500-267585-5	Duplicate	Total/NA	Water	SM 2540C	
MB 500-816630/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-816630/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-267585-1 MS	MW-03	Total/NA	Water	SM 2540C	
500-267585-1 DU	MW-03	Total/NA	Water	SM 2540C	
500-267585-2 DU	MW-04	Total/NA	Water	SM 2540C	

Analysis Batch: 817184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-267585-1	MW-03	Total/NA	Water	SM 4500 F C	
500-267585-2	MW-04	Total/NA	Water	SM 4500 F C	
500-267585-3	MW-05	Total/NA	Water	SM 4500 F C	
500-267585-4	MW-10	Total/NA	Water	SM 4500 F C	
500-267585-5	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-817184/31	Method Blank	Total/NA	Water	SM 4500 F C	
MB 500-817184/61	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-817184/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCS 500-817184/62	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-267585-3 MS	MW-05	Total/NA	Water	SM 4500 F C	
500-267585-3 MSD	MW-05	Total/NA	Water	SM 4500 F C	

Analysis Batch: 817192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-267585-1	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-267585-2	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-267585-3	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-267585-4	MW-10	Total/NA	Water	SM 4500 Cl- E	
500-267585-5	Duplicate	Total/NA	Water	SM 4500 Cl- E	
MB 500-817192/61	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-817192/62	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-267585-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-816972/1-A

Matrix: Water

Analysis Batch: 817255

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 816972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/08/25 16:11	05/09/25 13:49	1
Arsenic	<0.0010		0.0010		mg/L		05/08/25 16:11	05/09/25 13:49	1
Barium	<0.0025		0.0025		mg/L		05/08/25 16:11	05/09/25 13:49	1
Cadmium	<0.00050		0.00050		mg/L		05/08/25 16:11	05/09/25 13:49	1
Calcium	<0.20		0.20		mg/L		05/08/25 16:11	05/09/25 13:49	1
Chromium	<0.0050		0.0050		mg/L		05/08/25 16:11	05/09/25 13:49	1
Cobalt	<0.0010		0.0010		mg/L		05/08/25 16:11	05/09/25 13:49	1
Lead	<0.00050		0.00050		mg/L		05/08/25 16:11	05/09/25 13:49	1
Lithium	<0.010		0.010		mg/L		05/08/25 16:11	05/09/25 13:49	1
Molybdenum	<0.0050		0.0050		mg/L		05/08/25 16:11	05/09/25 13:49	1
Selenium	<0.0025		0.0025		mg/L		05/08/25 16:11	05/09/25 13:49	1
Thallium	<0.0020		0.0020		mg/L		05/08/25 16:11	05/09/25 13:49	1

Lab Sample ID: MB 500-816972/1-A

Matrix: Water

Analysis Batch: 817410

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 816972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0010		0.0010		mg/L		05/08/25 16:11	05/12/25 13:48	1
Boron	<0.050		0.050		mg/L		05/08/25 16:11	05/12/25 13:48	1

Lab Sample ID: LCS 500-816972/2-A

Matrix: Water

Analysis Batch: 817255

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 816972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.500	0.534		mg/L		107	80 - 120
Arsenic	0.100	0.0998		mg/L		100	80 - 120
Barium	0.500	0.518		mg/L		104	80 - 120
Cadmium	0.0500	0.0518		mg/L		104	80 - 120
Calcium	10.0	9.43		mg/L		94	80 - 120
Chromium	0.200	0.209		mg/L		105	80 - 120
Cobalt	0.500	0.521		mg/L		104	80 - 120
Lead	0.100	0.104		mg/L		104	80 - 120
Lithium	0.100	0.108		mg/L		108	80 - 120
Molybdenum	1.00	1.01		mg/L		101	80 - 120
Selenium	0.100	0.0996		mg/L		100	80 - 120
Thallium	0.100	0.105		mg/L		105	80 - 120

Lab Sample ID: LCS 500-816972/2-A

Matrix: Water

Analysis Batch: 817410

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 816972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	0.0500	0.0524		mg/L		105	80 - 120
Boron	1.00	1.04		mg/L		104	80 - 120

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QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-267585-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 500-816974/1-A

Matrix: Water

Analysis Batch: 817410

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 816974

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/08/25 16:15	05/12/25 15:44	1
Arsenic	<0.0010		0.0010		mg/L		05/08/25 16:15	05/12/25 15:44	1
Barium	<0.0025		0.0025		mg/L		05/08/25 16:15	05/12/25 15:44	1
Beryllium	<0.0010		0.0010		mg/L		05/08/25 16:15	05/12/25 15:44	1
Boron	<0.050		0.050		mg/L		05/08/25 16:15	05/12/25 15:44	1
Cadmium	<0.00050		0.00050		mg/L		05/08/25 16:15	05/12/25 15:44	1
Calcium	<0.20		0.20		mg/L		05/08/25 16:15	05/12/25 15:44	1
Chromium	<0.0050		0.0050		mg/L		05/08/25 16:15	05/12/25 15:44	1
Cobalt	<0.0010		0.0010		mg/L		05/08/25 16:15	05/12/25 15:44	1
Lead	<0.00050		0.00050		mg/L		05/08/25 16:15	05/12/25 15:44	1
Lithium	<0.010		0.010		mg/L		05/08/25 16:15	05/12/25 15:44	1
Molybdenum	<0.0050		0.0050		mg/L		05/08/25 16:15	05/12/25 15:44	1
Selenium	<0.0025		0.0025		mg/L		05/08/25 16:15	05/12/25 15:44	1
Thallium	<0.0020		0.0020		mg/L		05/08/25 16:15	05/12/25 15:44	1

Lab Sample ID: LCS 500-816974/2-A

Matrix: Water

Analysis Batch: 817410

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 816974

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.526		mg/L		105	80 - 120
Arsenic	0.100	0.0984		mg/L		98	80 - 120
Barium	0.500	0.518		mg/L		104	80 - 120
Beryllium	0.0500	0.0492		mg/L		98	80 - 120
Boron	1.00	1.01		mg/L		101	80 - 120
Cadmium	0.0500	0.0511		mg/L		102	80 - 120
Calcium	10.0	9.23		mg/L		92	80 - 120
Chromium	0.200	0.195		mg/L		98	80 - 120
Cobalt	0.500	0.519		mg/L		104	80 - 120
Lead	0.100	0.101		mg/L		101	80 - 120
Lithium	0.100	0.102		mg/L		102	80 - 120
Molybdenum	1.00	1.00		mg/L		100	80 - 120
Selenium	0.100	0.102		mg/L		102	80 - 120
Thallium	0.100	0.0985		mg/L		98	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-816622/12-A

Matrix: Water

Analysis Batch: 816904

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 816622

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/07/25 09:50	05/08/25 09:59	1

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QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-267585-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 500-816622/13-A
Matrix: Water
Analysis Batch: 816904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 816622

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00200	0.00177		mg/L		89	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-816630/1
Matrix: Water
Analysis Batch: 816630

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			05/07/25 00:21	1

Lab Sample ID: LCS 500-816630/2
Matrix: Water
Analysis Batch: 816630

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	272		mg/L		109	80 - 120

Lab Sample ID: 500-267585-1 MS
Matrix: Water
Analysis Batch: 816630

Client Sample ID: MW-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000		250	1360	4	mg/L		126	75 - 125

Lab Sample ID: 500-267585-1 DU
Matrix: Water
Analysis Batch: 816630

Client Sample ID: MW-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1000		1050		mg/L		0.4	5

Lab Sample ID: 500-267585-2 DU
Matrix: Water
Analysis Batch: 816630

Client Sample ID: MW-04
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1000		1090		mg/L		5	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-817192/61
Matrix: Water
Analysis Batch: 817192

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			05/11/25 10:36	1

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-267585-1

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: LCS 500-817192/62

Matrix: Water

Analysis Batch: 817192

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	20.6		mg/L		103	85 - 115

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-817184/31

Matrix: Water

Analysis Batch: 817184

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			05/10/25 11:44	1

Lab Sample ID: MB 500-817184/61

Matrix: Water

Analysis Batch: 817184

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			05/10/25 13:41	1

Lab Sample ID: LCS 500-817184/32

Matrix: Water

Analysis Batch: 817184

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	9.65		mg/L		97	90 - 119

Lab Sample ID: LCS 500-817184/62

Matrix: Water

Analysis Batch: 817184

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	9.97		mg/L		100	90 - 119

Lab Sample ID: 500-267585-3 MS

Matrix: Water

Analysis Batch: 817184

Client Sample ID: MW-05

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.32		5.00	5.66		mg/L		107	75 - 125

Lab Sample ID: 500-267585-3 MSD

Matrix: Water

Analysis Batch: 817184

Client Sample ID: MW-05

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.32		5.00	5.62		mg/L		106	75 - 125	1	20

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QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-267585-1

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-816626/61
Matrix: Water
Analysis Batch: 816626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			05/06/25 15:26	1

Lab Sample ID: LCS 500-816626/62
Matrix: Water
Analysis Batch: 816626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	20.0	21.5		mg/L		107	88 - 123

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[illegible]

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-267585-1

Login Number: 267585

List Number: 1

Creator: Scott, Sherri L

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0,4.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

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Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-267585-1

Client Sample ID: MW-03

Date Collected: 04/30/25 09:13

Date Received: 04/30/25 16:15

Lab Sample ID: 500-267585-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			816972	S1Z	EET CHI	05/08/25 16:11 - 05/08/25 22:11 ¹
Total Recoverable	Analysis	6020B		1	817255	RN	EET CHI	05/09/25 15:02
Total Recoverable	Prep	3005A			816972	S1Z	EET CHI	05/08/25 16:11 - 05/08/25 22:11 ¹
Total Recoverable	Analysis	6020B		1	817410	RN	EET CHI	05/12/25 15:15
Total/NA	Prep	7470A			816622	S1Z	EET CHI	05/07/25 09:50 - 05/07/25 11:50 ¹
Total/NA	Analysis	7470A		1	816904	MJG	EET CHI	05/08/25 10:50
Total/NA	Analysis	SM 2540C		1	816630	CLB	EET CHI	05/07/25 00:26
Total/NA	Analysis	SM 4500 CI- E		10	817192	TR	EET CHI	05/11/25 11:08
Total/NA	Analysis	SM 4500 F C		1	817184	AC	EET CHI	05/10/25 13:34
Total/NA	Analysis	SM 4500 SO4 E		5	816626	TR	EET CHI	05/06/25 15:48

Client Sample ID: MW-04

Date Collected: 04/30/25 10:10

Date Received: 04/30/25 16:15

Lab Sample ID: 500-267585-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			816974	S1Z	EET CHI	05/08/25 16:15 - 05/08/25 22:15 ¹
Total Recoverable	Analysis	6020B		1	817410	RN	EET CHI	05/12/25 15:49
Total/NA	Prep	7470A			816622	S1Z	EET CHI	05/07/25 09:50 - 05/07/25 11:50 ¹
Total/NA	Analysis	7470A		1	816904	MJG	EET CHI	05/08/25 10:52
Total/NA	Analysis	SM 2540C		1	816630	CLB	EET CHI	05/07/25 00:33
Total/NA	Analysis	SM 4500 CI- E		10	817192	TR	EET CHI	05/11/25 11:08
Total/NA	Analysis	SM 4500 F C		1	817184	AC	EET CHI	05/10/25 13:38
Total/NA	Analysis	SM 4500 SO4 E		5	816626	TR	EET CHI	05/06/25 15:48

Client Sample ID: MW-05

Date Collected: 04/30/25 13:06

Date Received: 04/30/25 16:15

Lab Sample ID: 500-267585-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			816974	S1Z	EET CHI	05/08/25 16:15 - 05/08/25 22:15 ¹
Total Recoverable	Analysis	6020B		1	817410	RN	EET CHI	05/12/25 15:51
Total/NA	Prep	7470A			816622	S1Z	EET CHI	05/07/25 09:50 - 05/07/25 11:50 ¹
Total/NA	Analysis	7470A		1	816904	MJG	EET CHI	05/08/25 10:59
Total/NA	Analysis	SM 2540C		1	816630	CLB	EET CHI	05/07/25 00:39
Total/NA	Analysis	SM 4500 CI- E		10	817192	TR	EET CHI	05/11/25 11:08
Total/NA	Analysis	SM 4500 F C		1	817184	AC	EET CHI	05/10/25 13:50
Total/NA	Analysis	SM 4500 SO4 E		5	816626	TR	EET CHI	05/06/25 15:49

Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-267585-1

Client Sample ID: MW-10

Date Collected: 04/30/25 14:33

Date Received: 04/30/25 16:15

Lab Sample ID: 500-267585-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			816974	S1Z	EET CHI	05/08/25 16:15 - 05/08/25 22:15 ¹
Total Recoverable	Analysis	6020B		1	817410	RN	EET CHI	05/12/25 15:54
Total/NA	Prep	7470A			816622	S1Z	EET CHI	05/07/25 09:50 - 05/07/25 11:50 ¹
Total/NA	Analysis	7470A		1	816904	MJG	EET CHI	05/08/25 11:01
Total/NA	Analysis	SM 2540C		1	816630	CLB	EET CHI	05/07/25 00:41
Total/NA	Analysis	SM 4500 Cl- E		10	817192	TR	EET CHI	05/11/25 11:09
Total/NA	Analysis	SM 4500 F C		1	817184	AC	EET CHI	05/10/25 13:57
Total/NA	Analysis	SM 4500 SO4 E		5	816626	TR	EET CHI	05/06/25 15:49

Client Sample ID: Duplicate

Date Collected: 04/30/25 00:00

Date Received: 04/30/25 16:15

Lab Sample ID: 500-267585-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			816974	S1Z	EET CHI	05/08/25 16:15 - 05/08/25 22:15 ¹
Total Recoverable	Analysis	6020B		1	817410	RN	EET CHI	05/12/25 16:01
Total/NA	Prep	7470A			816622	S1Z	EET CHI	05/07/25 09:50 - 05/07/25 11:50 ¹
Total/NA	Analysis	7470A		1	816904	MJG	EET CHI	05/08/25 11:03
Total/NA	Analysis	SM 2540C		1	816630	CLB	EET CHI	05/07/25 00:44
Total/NA	Analysis	SM 4500 Cl- E		10	817192	TR	EET CHI	05/11/25 11:09
Total/NA	Analysis	SM 4500 F C		1	817184	AC	EET CHI	05/10/25 13:59
Total/NA	Analysis	SM 4500 SO4 E		5	816626	TR	EET CHI	05/06/25 15:49

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200

ANALYTICAL REPORT

PREPARED FOR

Attn: James Thorne
Midwest Generation EME LLC
1800 Channahon Road
Joliet, Illinois 60436

Generated 6/2/2025 4:50:10 PM

JOB DESCRIPTION

Joliet #29 CCR (RAD)

JOB NUMBER

500-267585-2

Eurofins Chicago

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Authorization



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6/2/2025 4:50:10 PM

Authorized for release by
Diana Mockler, Project Manager I
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(219)252-7570

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Case Narrative

Client: Midwest Generation EME LLC
Project: Joliet #29 CCR (RAD)

Job ID: 500-267585-2

Job ID: 500-267585-2

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Job Narrative 500-267585-2

Receipt

The samples were received on 4/30/2025 4:15 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.0°C and 4.4°C.

Gas Flow Proportional Counter

Method 904.0: Radium 228 Batch 716180: The Radium-228 laboratory control sample (LCS) associated with the following samples recovered at 127%: (LCS 160-716180/2-A). The limits in our LIMS system at 75-125% reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of 68-154%. The LCS is within criteria and no further action is required.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Method Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-267585-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-267585-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-267585-1	MW-03	Water	04/30/25 09:13	04/30/25 16:15
500-267585-2	MW-04	Water	04/30/25 10:10	04/30/25 16:15
500-267585-3	MW-05	Water	04/30/25 13:06	04/30/25 16:15
500-267585-4	MW-10	Water	04/30/25 14:33	04/30/25 16:15
500-267585-5	Duplicate	Water	04/30/25 00:00	04/30/25 16:15

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-267585-2

Client Sample ID: MW-03

Lab Sample ID: 500-267585-1

Date Collected: 04/30/25 09:13

Matrix: Water

Date Received: 04/30/25 16:15

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.453		0.199	0.203	1.00	0.216	pCi/L	05/06/25 07:42	06/02/25 09:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.8		30 - 110					05/06/25 07:42	06/02/25 09:43	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.423	U	0.320	0.323	1.00	0.489	pCi/L	05/06/25 07:50	06/01/25 10:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.8		30 - 110					05/06/25 07:50	06/01/25 10:30	1
Y Carrier	80.0		30 - 110					05/06/25 07:50	06/01/25 10:30	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.876		0.377	0.381	5.00	0.489	pCi/L		06/02/25 16:21	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-267585-2

Client Sample ID: MW-04

Lab Sample ID: 500-267585-2

Date Collected: 04/30/25 10:10

Matrix: Water

Date Received: 04/30/25 16:15

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.407		0.194	0.197	1.00	0.219	pCi/L	05/06/25 07:42	06/02/25 09:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		30 - 110					05/06/25 07:42	06/02/25 09:43	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.520	U	0.362	0.365	1.00	0.546	pCi/L	05/06/25 07:50	06/01/25 10:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		30 - 110					05/06/25 07:50	06/01/25 10:30	1
Y Carrier	78.9		30 - 110					05/06/25 07:50	06/01/25 10:30	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.927		0.411	0.415	5.00	0.546	pCi/L		06/02/25 16:21	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-267585-2

Client Sample ID: MW-05

Lab Sample ID: 500-267585-3

Date Collected: 04/30/25 13:06

Matrix: Water

Date Received: 04/30/25 16:15

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.167	U	0.164	0.165	1.00	0.256	pCi/L	05/06/25 07:42	06/02/25 09:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.1		30 - 110					05/06/25 07:42	06/02/25 09:43	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.940		0.408	0.417	1.00	0.534	pCi/L	05/06/25 07:50	06/01/25 10:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.1		30 - 110					05/06/25 07:50	06/01/25 10:30	1
Y Carrier	79.6		30 - 110					05/06/25 07:50	06/01/25 10:30	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.11		0.440	0.448	5.00	0.534	pCi/L		06/02/25 16:21	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-267585-2

Client Sample ID: MW-10

Lab Sample ID: 500-267585-4

Date Collected: 04/30/25 14:33

Matrix: Water

Date Received: 04/30/25 16:15

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.318		0.182	0.184	1.00	0.231	pCi/L	05/06/25 07:42	06/02/25 09:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.5		30 - 110					05/06/25 07:42	06/02/25 09:43	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.454	U	0.324	0.327	1.00	0.487	pCi/L	05/06/25 07:50	06/01/25 10:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.5		30 - 110					05/06/25 07:50	06/01/25 10:30	1
Y Carrier	79.3		30 - 110					05/06/25 07:50	06/01/25 10:30	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.772		0.372	0.375	5.00	0.487	pCi/L		06/02/25 16:21	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-267585-2

Client Sample ID: Duplicate

Lab Sample ID: 500-267585-5

Date Collected: 04/30/25 00:00

Matrix: Water

Date Received: 04/30/25 16:15

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.478		0.214	0.219	1.00	0.243	pCi/L	05/06/25 07:42	06/02/25 09:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		30 - 110					05/06/25 07:42	06/02/25 09:43	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.806		0.370	0.378	1.00	0.483	pCi/L	05/06/25 07:50	06/01/25 10:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		30 - 110					05/06/25 07:50	06/01/25 10:31	1
Y Carrier	77.4		30 - 110					05/06/25 07:50	06/01/25 10:31	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.28		0.427	0.437	5.00	0.483	pCi/L		06/02/25 16:21	1

Definitions/Glossary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-267585-2

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-267585-2

Rad

Prep Batch: 716178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-267585-1	MW-03	Total/NA	Water	PrecSep-21	
500-267585-2	MW-04	Total/NA	Water	PrecSep-21	
500-267585-3	MW-05	Total/NA	Water	PrecSep-21	
500-267585-4	MW-10	Total/NA	Water	PrecSep-21	
500-267585-5	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-716178/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-716178/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 716180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-267585-1	MW-03	Total/NA	Water	PrecSep_0	
500-267585-2	MW-04	Total/NA	Water	PrecSep_0	
500-267585-3	MW-05	Total/NA	Water	PrecSep_0	
500-267585-4	MW-10	Total/NA	Water	PrecSep_0	
500-267585-5	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-716180/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-716180/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-267585-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-716178/1-A

Matrix: Water

Analysis Batch: 720203

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 716178

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.02039	U	0.165	0.165	1.00	0.335	pCi/L	05/06/25 07:42	06/02/25 07:47	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		30 - 110					05/06/25 07:42	06/02/25 07:47	1

Lab Sample ID: LCS 160-716178/2-A

Matrix: Water

Analysis Batch: 720203

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 716178

Analyte		Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226		9.58	10.54		1.30	1.00	0.263	pCi/L	110	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits							
Ba Carrier	86.6		30 - 110							

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-716180/1-A

Matrix: Water

Analysis Batch: 720153

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 716180

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.7566		0.401	0.407	1.00	0.562	pCi/L	05/06/25 07:50	06/01/25 10:24	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		30 - 110					05/06/25 07:50	06/01/25 10:24	1
Y Carrier	79.6		30 - 110					05/06/25 07:50	06/01/25 10:24	1

Lab Sample ID: LCS 160-716180/2-A

Matrix: Water

Analysis Batch: 720153

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 716180

Analyte		Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228		9.39	11.96		1.55	1.00	0.517	pCi/L	127	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits							
Ba Carrier	86.6		30 - 110							
Y Carrier	79.3		30 - 110							

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6/2/2025

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-267585-2

Login Number: 267585

List Source: Eurofins Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0,4.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Chicago

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-267585-2

Login Number: 267585

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 05/02/25 11:58 AM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

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Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-267585-2

Client Sample ID: MW-03

Lab Sample ID: 500-267585-1

Date Collected: 04/30/25 09:13

Matrix: Water

Date Received: 04/30/25 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			716178	OGC	EET SL	05/06/25 07:42
Total/NA	Analysis	903.0		1	720381	SWS	EET SL	06/02/25 09:43
Total/NA	Prep	PrecSep_0			716180	OGC	EET SL	05/06/25 07:50
Total/NA	Analysis	904.0		1	720153	SWS	EET SL	06/01/25 10:30
Total/NA	Analysis	Ra226_Ra228		1	720409	FLC	EET SL	06/02/25 16:21

Client Sample ID: MW-04

Lab Sample ID: 500-267585-2

Date Collected: 04/30/25 10:10

Matrix: Water

Date Received: 04/30/25 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			716178	OGC	EET SL	05/06/25 07:42
Total/NA	Analysis	903.0		1	720381	SWS	EET SL	06/02/25 09:43
Total/NA	Prep	PrecSep_0			716180	OGC	EET SL	05/06/25 07:50
Total/NA	Analysis	904.0		1	720153	SWS	EET SL	06/01/25 10:30
Total/NA	Analysis	Ra226_Ra228		1	720409	FLC	EET SL	06/02/25 16:21

Client Sample ID: MW-05

Lab Sample ID: 500-267585-3

Date Collected: 04/30/25 13:06

Matrix: Water

Date Received: 04/30/25 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			716178	OGC	EET SL	05/06/25 07:42
Total/NA	Analysis	903.0		1	720381	SWS	EET SL	06/02/25 09:43
Total/NA	Prep	PrecSep_0			716180	OGC	EET SL	05/06/25 07:50
Total/NA	Analysis	904.0		1	720153	SWS	EET SL	06/01/25 10:30
Total/NA	Analysis	Ra226_Ra228		1	720409	FLC	EET SL	06/02/25 16:21

Client Sample ID: MW-10

Lab Sample ID: 500-267585-4

Date Collected: 04/30/25 14:33

Matrix: Water

Date Received: 04/30/25 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			716178	OGC	EET SL	05/06/25 07:42
Total/NA	Analysis	903.0		1	720381	SWS	EET SL	06/02/25 09:43
Total/NA	Prep	PrecSep_0			716180	OGC	EET SL	05/06/25 07:50
Total/NA	Analysis	904.0		1	720153	SWS	EET SL	06/01/25 10:30
Total/NA	Analysis	Ra226_Ra228		1	720409	FLC	EET SL	06/02/25 16:21

Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-267585-2

Client Sample ID: Duplicate
Date Collected: 04/30/25 00:00
Date Received: 04/30/25 16:15

Lab Sample ID: 500-267585-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			716178	OGC	EET SL	05/06/25 07:42
Total/NA	Analysis	903.0		1	720381	SWS	EET SL	06/02/25 09:43
Total/NA	Prep	PrecSep_0			716180	OGC	EET SL	05/06/25 07:50
Total/NA	Analysis	904.0		1	720153	SWS	EET SL	06/01/25 10:31
Total/NA	Analysis	Ra226_Ra228		1	720409	FLC	EET SL	06/02/25 16:21

Laboratory References:
EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Tracer/Carrier Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-267585-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)			
Lab Sample ID	Client Sample ID	Ba			
		(30-110)			
500-267585-1	MW-03	92.8			
500-267585-2	MW-04	92.3			
500-267585-3	MW-05	87.1			
500-267585-4	MW-10	92.5			
500-267585-5	Duplicate	91.5			
LCS 160-716178/2-A	Lab Control Sample	86.6			
MB 160-716178/1-A	Method Blank	84.3			
Tracer/Carrier Legend					
Ba = Ba Carrier					

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)			
Lab Sample ID	Client Sample ID	Ba	Y		
		(30-110)	(30-110)		
500-267585-1	MW-03	92.8	80.0		
500-267585-2	MW-04	92.3	78.9		
500-267585-3	MW-05	87.1	79.6		
500-267585-4	MW-10	92.5	79.3		
500-267585-5	Duplicate	91.5	77.4		
LCS 160-716180/2-A	Lab Control Sample	86.6	79.3		
MB 160-716180/1-A	Method Blank	84.3	79.6		
Tracer/Carrier Legend					
Ba = Ba Carrier					
Y = Y Carrier					

ANALYTICAL REPORT

PREPARED FOR

Attn: James Thorne
Midwest Generation EME LLC
1800 Channahon Road
Joliet, Illinois 60436

Generated 10/26/2025 3:00:50 PM Revision 1

JOB DESCRIPTION

Joliet #29 CCR

JOB NUMBER

500-272772-1

Eurofins Chicago

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Authorization



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10/26/2025 3:00:50 PM
Revision 1

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Case Narrative

Client: Midwest Generation EME LLC
Project: Joliet #29 CCR

Job ID: 500-272772-1

Job ID: 500-272772-1

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Job Narrative 500-272772-1

REVISION

The report being provided is a revision of the original report sent on 8/25/2025. The report (revision 1) is being revised due to the addition of the ILEPA Edd, the revision has been added to report all metals, except Calcium, as ug/L..

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 8/7/2025 3:35 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.1°C and 3.4°C.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

Method 4500_F_C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 500-829942 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Method Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CHI
7470A	Mercury (CVAA)	SW846	EET CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CHI
SM 4500 Cl- E	Chloride, Total	SM	EET CHI
SM 4500 F C	Fluoride	SM	EET CHI
SM 4500 SO4 E	Sulfate, Total	SM	EET CHI
Field Sampling	Field Sampling	EPA	EET CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CHI
7470A	Preparation, Mercury	SW846	EET CHI

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200

Sample Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
500-272772-1	MW-03	Water	08/07/25 11:15	08/07/25 15:35	Illinois
500-272772-2	MW-04	Water	08/07/25 09:47	08/07/25 15:35	Illinois
500-272772-3	MW-05	Water	08/07/25 12:44	08/07/25 15:35	Illinois
500-272772-4	MW-10	Water	08/07/25 13:58	08/07/25 15:35	Illinois
500-272772-5	Duplicate	Water	08/07/25 00:00	08/07/25 15:35	Illinois

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Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-1

Client Sample ID: MW-03

Lab Sample ID: 500-272772-1

Date Collected: 08/07/25 11:15

Matrix: Water

Date Received: 08/07/25 15:35

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<3.0		3.0		ug/L		08/14/25 13:40	08/19/25 13:45	1
Arsenic	1.1		1.0		ug/L		08/14/25 13:40	08/19/25 13:45	1
Barium	120		2.5		ug/L		08/14/25 13:40	08/19/25 13:45	1
Beryllium	<1.0		1.0		ug/L		08/14/25 13:40	08/19/25 13:45	1
Boron	280		50		ug/L		08/14/25 13:40	08/19/25 13:45	1
Cadmium	<0.50		0.50		ug/L		08/14/25 13:40	08/19/25 13:45	1
Calcium	120		0.20		mg/L		08/14/25 13:40	08/19/25 13:45	1
Chromium	<5.0		5.0		ug/L		08/14/25 13:40	08/19/25 13:45	1
Cobalt	<1.0		1.0		ug/L		08/14/25 13:40	08/19/25 13:45	1
Lead	<0.50		0.50		ug/L		08/14/25 13:40	08/19/25 13:45	1
Lithium	11		10		ug/L		08/14/25 13:40	08/19/25 13:45	1
Molybdenum	<5.0		5.0		ug/L		08/14/25 13:40	08/19/25 13:45	1
Selenium	<2.5		2.5		ug/L		08/14/25 13:40	08/19/25 13:45	1
Thallium	<2.0		2.0		ug/L		08/14/25 13:40	08/19/25 13:45	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20		ug/L		08/15/25 10:15	08/18/25 11:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1200		10		mg/L			08/12/25 08:07	1
Chloride (SM 4500 Cl- E)	270		20		mg/L			08/17/25 10:56	10
Fluoride (SM 4500 F C)	0.61		0.10		mg/L			08/13/25 11:41	1
Sulfate (SM 4500 SO4 E)	180		25		mg/L			08/11/25 11:30	5

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.04				SU			08/07/25 11:15	1
Field Temperature	59.5				Degrees F			08/07/25 11:15	1
Groundwater Elevation	505.51				ft			08/07/25 11:15	1
Oxidation Reduction Potential	130.2				millivolts			08/07/25 11:15	1
Oxygen, Dissolved	7.04				mg/L			08/07/25 11:15	1
Specific Conductance	1.953				uS/cm			08/07/25 11:15	1
Turbidity	3.14				NTU			08/07/25 11:15	1

Eurofins Chicago

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-1

Client Sample ID: MW-04

Lab Sample ID: 500-272772-2

Date Collected: 08/07/25 09:47

Matrix: Water

Date Received: 08/07/25 15:35

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<3.0		3.0		ug/L		08/14/25 13:40	08/19/25 13:56	1
Arsenic	1.1		1.0		ug/L		08/14/25 13:40	08/19/25 13:56	1
Barium	84		2.5		ug/L		08/14/25 13:40	08/19/25 13:56	1
Beryllium	<1.0		1.0		ug/L		08/14/25 13:40	08/19/25 13:56	1
Boron	320		50		ug/L		08/14/25 13:40	08/19/25 13:56	1
Cadmium	<0.50		0.50		ug/L		08/14/25 13:40	08/19/25 13:56	1
Calcium	110		0.20		mg/L		08/14/25 13:40	08/19/25 13:56	1
Chromium	<5.0		5.0		ug/L		08/14/25 13:40	08/19/25 13:56	1
Cobalt	2.6		1.0		ug/L		08/14/25 13:40	08/19/25 13:56	1
Lead	<0.50		0.50		ug/L		08/14/25 13:40	08/19/25 13:56	1
Lithium	13		10		ug/L		08/14/25 13:40	08/19/25 13:56	1
Molybdenum	<5.0		5.0		ug/L		08/14/25 13:40	08/19/25 13:56	1
Selenium	<2.5		2.5		ug/L		08/14/25 13:40	08/19/25 13:56	1
Thallium	<2.0		2.0		ug/L		08/14/25 13:40	08/19/25 13:56	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20		ug/L		08/15/25 10:15	08/18/25 11:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1100		10		mg/L			08/12/25 08:10	1
Chloride (SM 4500 Cl- E)	240		20		mg/L			08/17/25 10:57	10
Fluoride (SM 4500 F C)	0.65		0.10		mg/L			08/13/25 11:45	1
Sulfate (SM 4500 SO4 E)	160		25		mg/L			08/11/25 11:31	5

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.04				SU			08/07/25 09:47	1
Field Temperature	57.9				Degrees F			08/07/25 09:47	1
Groundwater Elevation	505.42				ft			08/07/25 09:47	1
Oxidation Reduction Potential	124				millivolts			08/07/25 09:47	1
Oxygen, Dissolved	5.38				mg/L			08/07/25 09:47	1
Specific Conductance	1.834				uS/cm			08/07/25 09:47	1
Turbidity	23.77				NTU			08/07/25 09:47	1

Eurofins Chicago

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-1

Client Sample ID: MW-05

Lab Sample ID: 500-272772-3

Date Collected: 08/07/25 12:44

Matrix: Water

Date Received: 08/07/25 15:35

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<3.0		3.0		ug/L		08/14/25 13:40	08/19/25 14:00	1
Arsenic	<1.0		1.0		ug/L		08/14/25 13:40	08/19/25 14:00	1
Barium	67		2.5		ug/L		08/14/25 13:40	08/19/25 14:00	1
Beryllium	<1.0		1.0		ug/L		08/14/25 13:40	08/19/25 14:00	1
Boron	410		50		ug/L		08/14/25 13:40	08/19/25 14:00	1
Cadmium	<0.50		0.50		ug/L		08/14/25 13:40	08/19/25 14:00	1
Calcium	110		0.20		mg/L		08/14/25 13:40	08/19/25 14:00	1
Chromium	<5.0		5.0		ug/L		08/14/25 13:40	08/19/25 14:00	1
Cobalt	<1.0		1.0		ug/L		08/14/25 13:40	08/19/25 14:00	1
Lead	<0.50		0.50		ug/L		08/14/25 13:40	08/19/25 14:00	1
Lithium	17		10		ug/L		08/14/25 13:40	08/19/25 14:00	1
Molybdenum	<5.0		5.0		ug/L		08/14/25 13:40	08/19/25 14:00	1
Selenium	<2.5		2.5		ug/L		08/14/25 13:40	08/19/25 14:00	1
Thallium	<2.0		2.0		ug/L		08/14/25 13:40	08/19/25 14:00	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20		ug/L		08/15/25 10:15	08/18/25 11:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1100		10		mg/L			08/12/25 08:12	1
Chloride (SM 4500 Cl- E)	240		20		mg/L			08/17/25 10:57	10
Fluoride (SM 4500 F C)	0.49		0.10		mg/L			08/13/25 11:52	1
Sulfate (SM 4500 SO4 E)	170		25		mg/L			08/11/25 11:31	5

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.03				SU			08/07/25 12:44	1
Field Temperature	58.5				Degrees F			08/07/25 12:44	1
Groundwater Elevation	504.97				ft			08/07/25 12:44	1
Oxidation Reduction Potential	128.9				millivolts			08/07/25 12:44	1
Oxygen, Dissolved	5.41				mg/L			08/07/25 12:44	1
Specific Conductance	1.761				uS/cm			08/07/25 12:44	1
Turbidity	3.51				NTU			08/07/25 12:44	1

Eurofins Chicago

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-1

Client Sample ID: MW-10

Lab Sample ID: 500-272772-4

Date Collected: 08/07/25 13:58

Matrix: Water

Date Received: 08/07/25 15:35

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<3.0		3.0		ug/L		08/14/25 13:40	08/19/25 14:02	1
Arsenic	<1.0		1.0		ug/L		08/14/25 13:40	08/19/25 14:02	1
Barium	45		2.5		ug/L		08/14/25 13:40	08/19/25 14:02	1
Beryllium	<1.0		1.0		ug/L		08/14/25 13:40	08/19/25 14:02	1
Boron	350		50		ug/L		08/14/25 13:40	08/19/25 14:02	1
Cadmium	<0.50		0.50		ug/L		08/14/25 13:40	08/19/25 14:02	1
Calcium	110		0.20		mg/L		08/14/25 13:40	08/19/25 14:02	1
Chromium	<5.0		5.0		ug/L		08/14/25 13:40	08/19/25 14:02	1
Cobalt	<1.0		1.0		ug/L		08/14/25 13:40	08/19/25 14:02	1
Lead	<0.50		0.50		ug/L		08/14/25 13:40	08/19/25 14:02	1
Lithium	13		10		ug/L		08/14/25 13:40	08/19/25 14:02	1
Molybdenum	5.5		5.0		ug/L		08/14/25 13:40	08/19/25 14:02	1
Selenium	<2.5		2.5		ug/L		08/14/25 13:40	08/19/25 14:02	1
Thallium	<2.0		2.0		ug/L		08/14/25 13:40	08/19/25 14:02	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20		ug/L		08/15/25 10:15	08/18/25 11:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1000		10		mg/L			08/12/25 08:15	1
Chloride (SM 4500 Cl- E)	240		20		mg/L			08/17/25 10:57	10
Fluoride (SM 4500 F C)	0.60		0.10		mg/L			08/13/25 11:55	1
Sulfate (SM 4500 SO4 E)	180		25		mg/L			08/11/25 11:31	5

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.01				SU			08/07/25 13:58	1
Field Temperature	57.9				Degrees F			08/07/25 13:58	1
Groundwater Elevation	505.39				ft			08/07/25 13:58	1
Oxidation Reduction Potential	128.7				millivolts			08/07/25 13:58	1
Oxygen, Dissolved	6.72				mg/L			08/07/25 13:58	1
Specific Conductance	1.798				uS/cm			08/07/25 13:58	1
Turbidity	8.41				NTU			08/07/25 13:58	1

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Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-1

Client Sample ID: Duplicate

Lab Sample ID: 500-272772-5

Date Collected: 08/07/25 00:00

Matrix: Water

Date Received: 08/07/25 15:35

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<3.0		3.0		ug/L		08/14/25 13:40	08/19/25 14:09	1
Arsenic	1.1		1.0		ug/L		08/14/25 13:40	08/19/25 14:09	1
Barium	120		2.5		ug/L		08/14/25 13:40	08/19/25 14:09	1
Beryllium	<1.0		1.0		ug/L		08/14/25 13:40	08/19/25 14:09	1
Boron	290		50		ug/L		08/14/25 13:40	08/19/25 14:09	1
Cadmium	<0.50		0.50		ug/L		08/14/25 13:40	08/19/25 14:09	1
Calcium	130		0.20		mg/L		08/14/25 13:40	08/19/25 14:09	1
Chromium	<5.0		5.0		ug/L		08/14/25 13:40	08/19/25 14:09	1
Cobalt	<1.0		1.0		ug/L		08/14/25 13:40	08/19/25 14:09	1
Lead	<0.50		0.50		ug/L		08/14/25 13:40	08/19/25 14:09	1
Lithium	12		10		ug/L		08/14/25 13:40	08/19/25 14:09	1
Molybdenum	<5.0		5.0		ug/L		08/14/25 13:40	08/19/25 14:09	1
Selenium	<2.5		2.5		ug/L		08/14/25 13:40	08/19/25 14:09	1
Thallium	<2.0		2.0		ug/L		08/14/25 13:40	08/19/25 14:09	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20		ug/L		08/15/25 10:15	08/18/25 11:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1200		10		mg/L			08/12/25 08:18	1
Chloride (SM 4500 Cl- E)	270		20		mg/L			08/17/25 10:57	10
Fluoride (SM 4500 F C)	0.63	F1	0.10		mg/L			08/13/25 12:10	1
Sulfate (SM 4500 SO4 E)	180		25		mg/L			08/11/25 11:31	5

Definitions/Glossary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-1

Metals

Prep Batch: 830132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-272772-1	MW-03	Total Recoverable	Water	3005A	
500-272772-2	MW-04	Total Recoverable	Water	3005A	
500-272772-3	MW-05	Total Recoverable	Water	3005A	
500-272772-4	MW-10	Total Recoverable	Water	3005A	
500-272772-5	Duplicate	Total Recoverable	Water	3005A	
MB 500-830132/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-830132/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-272772-1 MS	MW-03	Total Recoverable	Water	3005A	
500-272772-1 MSD	MW-03	Total Recoverable	Water	3005A	
500-272772-1 DU	MW-03	Total Recoverable	Water	3005A	

Prep Batch: 830275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-272772-1	MW-03	Total/NA	Water	7470A	
500-272772-2	MW-04	Total/NA	Water	7470A	
500-272772-3	MW-05	Total/NA	Water	7470A	
500-272772-4	MW-10	Total/NA	Water	7470A	
500-272772-5	Duplicate	Total/NA	Water	7470A	
MB 500-830275/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-830275/13-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 830487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-272772-1	MW-03	Total/NA	Water	7470A	830275
500-272772-2	MW-04	Total/NA	Water	7470A	830275
500-272772-3	MW-05	Total/NA	Water	7470A	830275
500-272772-4	MW-10	Total/NA	Water	7470A	830275
500-272772-5	Duplicate	Total/NA	Water	7470A	830275
MB 500-830275/12-A	Method Blank	Total/NA	Water	7470A	830275
LCS 500-830275/13-A	Lab Control Sample	Total/NA	Water	7470A	830275

Analysis Batch: 830756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-272772-1	MW-03	Total Recoverable	Water	6020B	830132
500-272772-2	MW-04	Total Recoverable	Water	6020B	830132
500-272772-3	MW-05	Total Recoverable	Water	6020B	830132
500-272772-4	MW-10	Total Recoverable	Water	6020B	830132
500-272772-5	Duplicate	Total Recoverable	Water	6020B	830132
MB 500-830132/1-A	Method Blank	Total Recoverable	Water	6020B	830132
LCS 500-830132/2-A	Lab Control Sample	Total Recoverable	Water	6020B	830132
500-272772-1 MS	MW-03	Total Recoverable	Water	6020B	830132
500-272772-1 MSD	MW-03	Total Recoverable	Water	6020B	830132
500-272772-1 DU	MW-03	Total Recoverable	Water	6020B	830132

General Chemistry

Analysis Batch: 829509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-272772-1	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-272772-2	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-272772-3	MW-05	Total/NA	Water	SM 4500 SO4 E	

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QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-1

General Chemistry (Continued)

Analysis Batch: 829509 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-272772-4	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-272772-5	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-829509/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-829509/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 829600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-272772-1	MW-03	Total/NA	Water	SM 2540C	
500-272772-2	MW-04	Total/NA	Water	SM 2540C	
500-272772-3	MW-05	Total/NA	Water	SM 2540C	
500-272772-4	MW-10	Total/NA	Water	SM 2540C	
500-272772-5	Duplicate	Total/NA	Water	SM 2540C	
MB 500-829600/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-829600/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 829942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-272772-1	MW-03	Total/NA	Water	SM 4500 F C	
500-272772-2	MW-04	Total/NA	Water	SM 4500 F C	
500-272772-3	MW-05	Total/NA	Water	SM 4500 F C	
500-272772-4	MW-10	Total/NA	Water	SM 4500 F C	
500-272772-5	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-829942/3	Method Blank	Total/NA	Water	SM 4500 F C	
MB 500-829942/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-829942/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCS 500-829942/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-272772-5 MS	Duplicate	Total/NA	Water	SM 4500 F C	
500-272772-5 MSD	Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 830368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-272772-1	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-272772-2	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-272772-3	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-272772-4	MW-10	Total/NA	Water	SM 4500 Cl- E	
500-272772-5	Duplicate	Total/NA	Water	SM 4500 Cl- E	
MB 500-830368/16	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-830368/17	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Field Service / Mobile Lab

Analysis Batch: 839230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-272772-1	MW-03	Total/NA	Water	Field Sampling	
500-272772-2	MW-04	Total/NA	Water	Field Sampling	
500-272772-3	MW-05	Total/NA	Water	Field Sampling	
500-272772-4	MW-10	Total/NA	Water	Field Sampling	

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-830132/1-A
Matrix: Water
Analysis Batch: 830756

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 830132

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<3.0		3.0		ug/L		08/14/25 13:40	08/19/25 13:41	1
Arsenic	<1.0		1.0		ug/L		08/14/25 13:40	08/19/25 13:41	1
Barium	<2.5		2.5		ug/L		08/14/25 13:40	08/19/25 13:41	1
Beryllium	<1.0		1.0		ug/L		08/14/25 13:40	08/19/25 13:41	1
Boron	<50		50		ug/L		08/14/25 13:40	08/19/25 13:41	1
Cadmium	<0.50		0.50		ug/L		08/14/25 13:40	08/19/25 13:41	1
Calcium	<0.20		0.20		mg/L		08/14/25 13:40	08/19/25 13:41	1
Chromium	<5.0		5.0		ug/L		08/14/25 13:40	08/19/25 13:41	1
Cobalt	<1.0		1.0		ug/L		08/14/25 13:40	08/19/25 13:41	1
Lead	<0.50		0.50		ug/L		08/14/25 13:40	08/19/25 13:41	1
Lithium	<10		10		ug/L		08/14/25 13:40	08/19/25 13:41	1
Molybdenum	<5.0		5.0		ug/L		08/14/25 13:40	08/19/25 13:41	1
Selenium	<2.5		2.5		ug/L		08/14/25 13:40	08/19/25 13:41	1
Thallium	<2.0		2.0		ug/L		08/14/25 13:40	08/19/25 13:41	1

Lab Sample ID: LCS 500-830132/2-A
Matrix: Water
Analysis Batch: 830756

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 830132

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	500	512		ug/L		102	80 - 120
Arsenic	100	94.4		ug/L		94	80 - 120
Barium	500	479		ug/L		96	80 - 120
Beryllium	50.0	47.5		ug/L		95	80 - 120
Boron	1000	944		ug/L		94	80 - 120
Cadmium	50.0	48.1		ug/L		96	80 - 120
Calcium	10.0	8.07		mg/L		81	80 - 120
Chromium	200	194		ug/L		97	80 - 120
Cobalt	500	512		ug/L		102	80 - 120
Lead	100	99.9		ug/L		100	80 - 120
Lithium	100	106		ug/L		106	80 - 120
Molybdenum	1000	974		ug/L		97	80 - 120
Selenium	100	97.8		ug/L		98	80 - 120
Thallium	100	101		ug/L		101	80 - 120

Lab Sample ID: 500-272772-1 MS
Matrix: Water
Analysis Batch: 830756

Client Sample ID: MW-03
Prep Type: Total Recoverable
Prep Batch: 830132

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<3.0		500	505		ug/L		101	75 - 125
Arsenic	1.1		100	95.6		ug/L		95	75 - 125
Barium	120		500	593		ug/L		95	75 - 125
Beryllium	<1.0		50.0	47.3		ug/L		95	75 - 125
Boron	280		1000	1270		ug/L		99	75 - 125
Cadmium	<0.50		50.0	47.9		ug/L		96	75 - 125
Calcium	120		10.0	135	4	mg/L		119	75 - 125
Chromium	<5.0		200	192		ug/L		96	75 - 125
Cobalt	<1.0		500	490		ug/L		98	75 - 125

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QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-272772-1 MS

Matrix: Water

Analysis Batch: 830756

Client Sample ID: MW-03

Prep Type: Total Recoverable

Prep Batch: 830132

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	<0.50		100	100		ug/L		100	75 - 125
Lithium	11		100	110		ug/L		99	75 - 125
Molybdenum	<5.0		1000	1010		ug/L		100	75 - 125
Selenium	<2.5		100	97.2		ug/L		96	75 - 125
Thallium	<2.0		100	102		ug/L		102	75 - 125

Lab Sample ID: 500-272772-1 MSD

Matrix: Water

Analysis Batch: 830756

Client Sample ID: MW-03

Prep Type: Total Recoverable

Prep Batch: 830132

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<3.0		500	511		ug/L		102	75 - 125	1	20
Arsenic	1.1		100	96.3		ug/L		95	75 - 125	1	20
Barium	120		500	589		ug/L		94	75 - 125	1	20
Beryllium	<1.0		50.0	48.3		ug/L		97	75 - 125	2	20
Boron	280		1000	1270		ug/L		100	75 - 125	1	20
Cadmium	<0.50		50.0	48.2		ug/L		96	75 - 125	1	20
Calcium	120		10.0	135	4	mg/L		119	75 - 125	0	20
Chromium	<5.0		200	191		ug/L		96	75 - 125	0	20
Cobalt	<1.0		500	490		ug/L		98	75 - 125	0	20
Lead	<0.50		100	101		ug/L		101	75 - 125	1	20
Lithium	11		100	114		ug/L		102	75 - 125	3	20
Molybdenum	<5.0		1000	1010		ug/L		101	75 - 125	0	20
Selenium	<2.5		100	95.3		ug/L		94	75 - 125	2	20
Thallium	<2.0		100	102		ug/L		102	75 - 125	0	20

Lab Sample ID: 500-272772-1 DU

Matrix: Water

Analysis Batch: 830756

Client Sample ID: MW-03

Prep Type: Total Recoverable

Prep Batch: 830132

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<3.0		<3.0		ug/L		NC	20
Arsenic	1.1		1.16		ug/L		6	20
Barium	120		120		ug/L		1	20
Beryllium	<1.0		<1.0		ug/L		NC	20
Boron	280		285		ug/L		3	20
Cadmium	<0.50		<0.50		ug/L		NC	20
Calcium	120		126		mg/L		2	20
Chromium	<5.0		<5.0		ug/L		NC	20
Cobalt	<1.0		<1.0		ug/L		NC	20
Lead	<0.50		<0.50		ug/L		NC	20
Lithium	11		11.4		ug/L		0.7	20
Molybdenum	<5.0		<5.0		ug/L		NC	20
Selenium	<2.5		<2.5		ug/L		NC	20
Thallium	<2.0		<2.0		ug/L		NC	20

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QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-830275/12-A
Matrix: Water
Analysis Batch: 830487

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 830275

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20		ug/L		08/15/25 10:15	08/18/25 10:51	1

Lab Sample ID: LCS 500-830275/13-A
Matrix: Water
Analysis Batch: 830487

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 830275

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.00	2.03		ug/L		102	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-829600/1
Matrix: Water
Analysis Batch: 829600

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			08/12/25 07:47	1

Lab Sample ID: LCS 500-829600/2
Matrix: Water
Analysis Batch: 829600

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	254		mg/L		102	80 - 120

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-830368/16
Matrix: Water
Analysis Batch: 830368

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			08/17/25 10:38	1

Lab Sample ID: LCS 500-830368/17
Matrix: Water
Analysis Batch: 830368

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	19.7		mg/L		98	85 - 115

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-829942/3
Matrix: Water
Analysis Batch: 829942

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			08/13/25 09:55	1

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QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-1

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: MB 500-829942/31

Matrix: Water

Analysis Batch: 829942

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			08/13/25 11:59	1

Lab Sample ID: LCS 500-829942/32

Matrix: Water

Analysis Batch: 829942

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	9.84		mg/L		98	90 - 119

Lab Sample ID: LCS 500-829942/4

Matrix: Water

Analysis Batch: 829942

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	9.62		mg/L		96	90 - 119

Lab Sample ID: 500-272772-5 MS

Matrix: Water

Analysis Batch: 829942

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.63	F1	5.00	8.03	F1	mg/L		148	75 - 125

Lab Sample ID: 500-272772-5 MSD

Matrix: Water

Analysis Batch: 829942

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.63	F1	5.00	7.97	F1	mg/L		147	75 - 125	1	20

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-829509/16

Matrix: Water

Analysis Batch: 829509

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			08/11/25 11:13	1

Lab Sample ID: LCS 500-829509/17

Matrix: Water

Analysis Batch: 829509

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	20.0	21.1		mg/L		106	88 - 123

Eurofins Chicago

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10/26/2025 (Rev. 1)

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-272772-1

Login Number: 272772

List Number: 1

Creator: Scott, Sherri L

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1,3.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Chicago

Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-1

Client Sample ID: MW-03

Date Collected: 08/07/25 11:15

Date Received: 08/07/25 15:35

Lab Sample ID: 500-272772-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			830132	MS	EET CHI	08/14/25 13:40 - 08/14/25 19:40 ¹
Total Recoverable	Analysis	6020B		1	830756	RN	EET CHI	08/19/25 13:45
Total/NA	Prep	7470A			830275	MJG	EET CHI	08/15/25 10:15 - 08/15/25 12:15 ¹
Total/NA	Analysis	7470A		1	830487	MJG	EET CHI	08/18/25 11:30
Total/NA	Analysis	SM 2540C		1	829600	CLB	EET CHI	08/12/25 08:07
Total/NA	Analysis	SM 4500 CI- E		10	830368	TR	EET CHI	08/17/25 10:56
Total/NA	Analysis	SM 4500 F C		1	829942	AC	EET CHI	08/13/25 11:41
Total/NA	Analysis	SM 4500 SO4 E		5	829509	TR	EET CHI	08/11/25 11:30
Total/NA	Analysis	Field Sampling		1	839230	DN	EET CHI	08/07/25 11:15

Client Sample ID: MW-04

Date Collected: 08/07/25 09:47

Date Received: 08/07/25 15:35

Lab Sample ID: 500-272772-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			830132	MS	EET CHI	08/14/25 13:40 - 08/14/25 19:40 ¹
Total Recoverable	Analysis	6020B		1	830756	RN	EET CHI	08/19/25 13:56
Total/NA	Prep	7470A			830275	MJG	EET CHI	08/15/25 10:15 - 08/15/25 12:15 ¹
Total/NA	Analysis	7470A		1	830487	MJG	EET CHI	08/18/25 11:32
Total/NA	Analysis	SM 2540C		1	829600	CLB	EET CHI	08/12/25 08:10
Total/NA	Analysis	SM 4500 CI- E		10	830368	TR	EET CHI	08/17/25 10:57
Total/NA	Analysis	SM 4500 F C		1	829942	AC	EET CHI	08/13/25 11:45
Total/NA	Analysis	SM 4500 SO4 E		5	829509	TR	EET CHI	08/11/25 11:31
Total/NA	Analysis	Field Sampling		1	839230	DN	EET CHI	08/07/25 09:47

Client Sample ID: MW-05

Date Collected: 08/07/25 12:44

Date Received: 08/07/25 15:35

Lab Sample ID: 500-272772-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			830132	MS	EET CHI	08/14/25 13:40 - 08/14/25 19:40 ¹
Total Recoverable	Analysis	6020B		1	830756	RN	EET CHI	08/19/25 14:00
Total/NA	Prep	7470A			830275	MJG	EET CHI	08/15/25 10:15 - 08/15/25 12:15 ¹
Total/NA	Analysis	7470A		1	830487	MJG	EET CHI	08/18/25 11:34
Total/NA	Analysis	SM 2540C		1	829600	CLB	EET CHI	08/12/25 08:12
Total/NA	Analysis	SM 4500 CI- E		10	830368	TR	EET CHI	08/17/25 10:57
Total/NA	Analysis	SM 4500 F C		1	829942	AC	EET CHI	08/13/25 11:52
Total/NA	Analysis	SM 4500 SO4 E		5	829509	TR	EET CHI	08/11/25 11:31
Total/NA	Analysis	Field Sampling		1	839230	DN	EET CHI	08/07/25 12:44

Eurofins Chicago

Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-1

Client Sample ID: MW-10

Date Collected: 08/07/25 13:58

Date Received: 08/07/25 15:35

Lab Sample ID: 500-272772-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			830132	MS	EET CHI	08/14/25 13:40 - 08/14/25 19:40 ¹
Total Recoverable	Analysis	6020B		1	830756	RN	EET CHI	08/19/25 14:02
Total/NA	Prep	7470A			830275	MJG	EET CHI	08/15/25 10:15 - 08/15/25 12:15 ¹
Total/NA	Analysis	7470A		1	830487	MJG	EET CHI	08/18/25 11:36
Total/NA	Analysis	SM 2540C		1	829600	CLB	EET CHI	08/12/25 08:15
Total/NA	Analysis	SM 4500 Cl- E		10	830368	TR	EET CHI	08/17/25 10:57
Total/NA	Analysis	SM 4500 F C		1	829942	AC	EET CHI	08/13/25 11:55
Total/NA	Analysis	SM 4500 SO4 E		5	829509	TR	EET CHI	08/11/25 11:31
Total/NA	Analysis	Field Sampling		1	839230	DN	EET CHI	08/07/25 13:58

Client Sample ID: Duplicate

Date Collected: 08/07/25 00:00

Date Received: 08/07/25 15:35

Lab Sample ID: 500-272772-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			830132	MS	EET CHI	08/14/25 13:40 - 08/14/25 19:40 ¹
Total Recoverable	Analysis	6020B		1	830756	RN	EET CHI	08/19/25 14:09
Total/NA	Prep	7470A			830275	MJG	EET CHI	08/15/25 10:15 - 08/15/25 12:15 ¹
Total/NA	Analysis	7470A		1	830487	MJG	EET CHI	08/18/25 11:38
Total/NA	Analysis	SM 2540C		1	829600	CLB	EET CHI	08/12/25 08:18
Total/NA	Analysis	SM 4500 Cl- E		10	830368	TR	EET CHI	08/17/25 10:57
Total/NA	Analysis	SM 4500 F C		1	829942	AC	EET CHI	08/13/25 12:10
Total/NA	Analysis	SM 4500 SO4 E		5	829509	TR	EET CHI	08/11/25 11:31

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200

ANALYTICAL REPORT

PREPARED FOR

Attn: James Thorne
Midwest Generation EME LLC
1800 Channahon Road
Joliet, Illinois 60436

Generated 09/05/25 15:04:34

JOB DESCRIPTION

Joliet #29 CCR

JOB NUMBER

500-272772-2

Eurofins Chicago

Job Notes

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Authorization



Generated
09/05/25 15:04:34

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Case Narrative

Client: Midwest Generation EME LLC
Project: Joliet #29 CCR

Job ID: 500-272772-2

Job ID: 500-272772-2

Eurofins Chicago

Job Narrative 500-272772-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 8/7/2025 3:35 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.1°C and 3.4°C.

Gas Flow Proportional Counter

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Chicago

Method Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
500-272772-1	MW-03	Water	08/07/25 11:15	08/07/25 15:35	Illinois
500-272772-2	MW-04	Water	08/07/25 09:47	08/07/25 15:35	Illinois
500-272772-3	MW-05	Water	08/07/25 12:44	08/07/25 15:35	Illinois
500-272772-4	MW-10	Water	08/07/25 13:58	08/07/25 15:35	Illinois
500-272772-5	Duplicate	Water	08/07/25 00:00	08/07/25 15:35	Illinois

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-2

Client Sample ID: MW-03

Lab Sample ID: 500-272772-1

Date Collected: 08/07/25 11:15

Matrix: Water

Date Received: 08/07/25 15:35

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.112	U	0.0874	0.0879	1.00	0.128	pCi/L	08/13/25 08:12	09/04/25 14:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.1		30 - 110					08/13/25 08:12	09/04/25 14:18	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.230	U	0.307	0.308	1.00	0.514	pCi/L	08/13/25 08:17	08/28/25 11:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.1		30 - 110					08/13/25 08:17	08/28/25 11:51	1
Y Carrier	86.4		30 - 110					08/13/25 08:17	08/28/25 11:51	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.342	U	0.319	0.320	5.00	0.514	pCi/L		09/03/25 14:01	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-2

Client Sample ID: MW-04

Lab Sample ID: 500-272772-2

Date Collected: 08/07/25 09:47

Matrix: Water

Date Received: 08/07/25 15:35

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0679	U	0.0772	0.0774	1.00	0.125	pCi/L	08/13/25 08:12	09/04/25 14:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		30 - 110					08/13/25 08:12	09/04/25 14:18	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.513		0.330	0.333	1.00	0.488	pCi/L	08/13/25 08:17	08/28/25 11:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		30 - 110					08/13/25 08:17	08/28/25 11:51	1
Y Carrier	86.0		30 - 110					08/13/25 08:17	08/28/25 11:51	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.581		0.339	0.342	5.00	0.488	pCi/L		09/03/25 14:01	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-2

Client Sample ID: MW-05

Lab Sample ID: 500-272772-3

Date Collected: 08/07/25 12:44

Matrix: Water

Date Received: 08/07/25 15:35

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0141	U	0.0837	0.0837	1.00	0.157	pCi/L	08/13/25 08:12	09/04/25 14:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		30 - 110					08/13/25 08:12	09/04/25 14:18	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0314	U	0.297	0.297	1.00	0.544	pCi/L	08/13/25 08:17	08/28/25 11:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		30 - 110					08/13/25 08:17	08/28/25 11:52	1
Y Carrier	81.9		30 - 110					08/13/25 08:17	08/28/25 11:52	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0455	U	0.309	0.309	5.00	0.544	pCi/L		09/03/25 14:01	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-2

Client Sample ID: MW-10

Lab Sample ID: 500-272772-4

Date Collected: 08/07/25 13:58

Matrix: Water

Date Received: 08/07/25 15:35

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0827	U	0.104	0.104	1.00	0.172	pCi/L	08/13/25 08:12	09/04/25 14:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		30 - 110					08/13/25 08:12	09/04/25 14:18	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.258	U	0.342	0.343	1.00	0.572	pCi/L	08/13/25 08:17	08/28/25 11:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		30 - 110					08/13/25 08:17	08/28/25 11:52	1
Y Carrier	81.1		30 - 110					08/13/25 08:17	08/28/25 11:52	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.340	U	0.357	0.358	5.00	0.572	pCi/L		09/03/25 14:01	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-2

Client Sample ID: Duplicate

Lab Sample ID: 500-272772-5

Date Collected: 08/07/25 00:00

Matrix: Water

Date Received: 08/07/25 15:35

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.137	U	0.101	0.102	1.00	0.148	pCi/L	08/13/25 08:12	09/04/25 14:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		30 - 110					08/13/25 08:12	09/04/25 14:17	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.392	U	0.278	0.281	1.00	0.413	pCi/L	08/13/25 08:17	08/28/25 11:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		30 - 110					08/13/25 08:17	08/28/25 11:52	1
Y Carrier	83.7		30 - 110					08/13/25 08:17	08/28/25 11:52	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.529		0.296	0.299	5.00	0.413	pCi/L		09/03/25 14:01	1

Definitions/Glossary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-2

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-2

Rad

Prep Batch: 731798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-272772-1	MW-03	Total/NA	Water	PrecSep-21	
500-272772-2	MW-04	Total/NA	Water	PrecSep-21	
500-272772-3	MW-05	Total/NA	Water	PrecSep-21	
500-272772-4	MW-10	Total/NA	Water	PrecSep-21	
500-272772-5	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-731798/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-731798/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 731799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-272772-1	MW-03	Total/NA	Water	PrecSep_0	
500-272772-2	MW-04	Total/NA	Water	PrecSep_0	
500-272772-3	MW-05	Total/NA	Water	PrecSep_0	
500-272772-4	MW-10	Total/NA	Water	PrecSep_0	
500-272772-5	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-731799/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-731799/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-731798/1-A

Matrix: Water

Analysis Batch: 734802

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 731798

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.008647	U	0.0407	0.0407	1.00	0.0959	pCi/L	08/13/25 08:12	09/04/25 07:25	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		30 - 110					08/13/25 08:12	09/04/25 07:25	1

Lab Sample ID: LCS 160-731798/2-A

Matrix: Water

Analysis Batch: 734802

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 731798

Analyte		Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226		9.57	9.556		1.02	1.00	0.119	pCi/L	100	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits							
Ba Carrier	92.6		30 - 110							

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-731799/1-A

Matrix: Water

Analysis Batch: 734026

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 731799

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.06391	U	0.304	0.304	1.00	0.581	pCi/L	08/13/25 08:17	08/28/25 11:46	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		30 - 110					08/13/25 08:17	08/28/25 11:46	1
Y Carrier	80.4		30 - 110					08/13/25 08:17	08/28/25 11:46	1

Lab Sample ID: LCS 160-731799/2-A

Matrix: Water

Analysis Batch: 734026

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 731799

Analyte		Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228		9.12	9.854		1.33	1.00	0.603	pCi/L	108	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits							
Ba Carrier	92.6		30 - 110							
Y Carrier	82.2		30 - 110							

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Page 15 of 21

Eurofins Chicago
18410 Crossing Drive Suite E
Tinlev Park, IL 60487



Client Information (Sub Contract Lab)										Carrier Tracking No(s)		COC No:																							
Client Contact										Mockler, Diana J		500-210049;1																							
Shipping/Receiving										E-Mail:		Page: 1 of 1																							
Company										Diana Mockler@et.eurofinsus.com		Job #:																							
TestAmerica Laboratories, Inc.										Accreditations Required (See note):		500-272772-2																							
Address:										NELAP - Illinois		Preservation Codes:																							
Due Date Requested:										9/8/2025																									
TAT Requested (days):										N/A																									
City:										N/A																									
State, Zip:										N/A																									
Phone:										N/A																									
Email:										N/A																									
Project Name:										Joliet #29 CCR																									
Site:										NRG Midwest Generation LSQ Joliet#29 CCR																									
SSOW#:										N/A																									
Sample Identification - Client ID (Lab ID)										Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/oli, BT=Tissue, AA=As)		Preservation Code:		Frid Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		903.0/P/PreSep_21Standard Target List		904.0/P/PreSep_05Standard Target List		Ra226Ra228_GFPc		Total Number of containers		Special Instructions/Note:			
MW-03 (500-272772-1)										8/7/25		11:15 Central		G		Water																		Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;	
MW-04 (500-272772-2)										8/7/25		09:47 Central		G		Water																Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;			
MW-05 (500-272772-3)										8/7/25		12:44 Central		G		Water																Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;			
MW-10 (500-272772-4)										8/7/25		13:58 Central		G		Water																Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;			
Duplicate (500-272772-5)										8/7/25		Central		G		Water																Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;			

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-272772-2

Login Number: 272772

List Source: Eurofins Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1,3.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Chicago

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-272772-2

Login Number: 272772

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 08/08/25 11:46 AM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Chicago

Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-2

Client Sample ID: MW-03

Lab Sample ID: 500-272772-1

Date Collected: 08/07/25 11:15

Matrix: Water

Date Received: 08/07/25 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731798	JTR	EET SL	08/13/25 08:12
Total/NA	Analysis	903.0		1	734807	SWS	EET SL	09/04/25 14:18
Total/NA	Prep	PrecSep_0			731799	JTR	EET SL	08/13/25 08:17
Total/NA	Analysis	904.0		1	734041	SWS	EET SL	08/28/25 11:51
Total/NA	Analysis	Ra226_Ra228		1	734645	FLC	EET SL	09/03/25 14:01

Client Sample ID: MW-04

Lab Sample ID: 500-272772-2

Date Collected: 08/07/25 09:47

Matrix: Water

Date Received: 08/07/25 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731798	JTR	EET SL	08/13/25 08:12
Total/NA	Analysis	903.0		1	734807	SWS	EET SL	09/04/25 14:18
Total/NA	Prep	PrecSep_0			731799	JTR	EET SL	08/13/25 08:17
Total/NA	Analysis	904.0		1	734041	SWS	EET SL	08/28/25 11:51
Total/NA	Analysis	Ra226_Ra228		1	734645	FLC	EET SL	09/03/25 14:01

Client Sample ID: MW-05

Lab Sample ID: 500-272772-3

Date Collected: 08/07/25 12:44

Matrix: Water

Date Received: 08/07/25 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731798	JTR	EET SL	08/13/25 08:12
Total/NA	Analysis	903.0		1	734807	SWS	EET SL	09/04/25 14:18
Total/NA	Prep	PrecSep_0			731799	JTR	EET SL	08/13/25 08:17
Total/NA	Analysis	904.0		1	734041	SWS	EET SL	08/28/25 11:52
Total/NA	Analysis	Ra226_Ra228		1	734645	FLC	EET SL	09/03/25 14:01

Client Sample ID: MW-10

Lab Sample ID: 500-272772-4

Date Collected: 08/07/25 13:58

Matrix: Water

Date Received: 08/07/25 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731798	JTR	EET SL	08/13/25 08:12
Total/NA	Analysis	903.0		1	734807	SWS	EET SL	09/04/25 14:18
Total/NA	Prep	PrecSep_0			731799	JTR	EET SL	08/13/25 08:17
Total/NA	Analysis	904.0		1	734041	SWS	EET SL	08/28/25 11:52
Total/NA	Analysis	Ra226_Ra228		1	734645	FLC	EET SL	09/03/25 14:01

Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-2

Client Sample ID: Duplicate
Date Collected: 08/07/25 00:00
Date Received: 08/07/25 15:35

Lab Sample ID: 500-272772-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731798	JTR	EET SL	08/13/25 08:12
Total/NA	Analysis	903.0		1	734807	SWS	EET SL	09/04/25 14:17
Total/NA	Prep	PrecSep_0			731799	JTR	EET SL	08/13/25 08:17
Total/NA	Analysis	904.0		1	734041	SWS	EET SL	08/28/25 11:52
Total/NA	Analysis	Ra226_Ra228		1	734645	FLC	EET SL	09/03/25 14:01

Laboratory References:
EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Tracer/Carrier Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-272772-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)					
Lab Sample ID	Client Sample ID	Ba					
		(30-110)					
500-272772-1	MW-03	89.1					
500-272772-2	MW-04	94.3					
500-272772-3	MW-05	95.0					
500-272772-4	MW-10	90.1					
500-272772-5	Duplicate	96.5					
LCS 160-731798/2-A	Lab Control Sample	92.6					
MB 160-731798/1-A	Method Blank	92.1					
Tracer/Carrier Legend							
Ba = Ba Carrier							

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)					
Lab Sample ID	Client Sample ID	Ba	Y				
		(30-110)	(30-110)				
500-272772-1	MW-03	89.1	86.4				
500-272772-2	MW-04	94.3	86.0				
500-272772-3	MW-05	95.0	81.9				
500-272772-4	MW-10	90.1	81.1				
500-272772-5	Duplicate	96.5	83.7				
LCS 160-731799/2-A	Lab Control Sample	92.6	82.2				
MB 160-731799/1-A	Method Blank	92.1	80.4				
Tracer/Carrier Legend							
Ba = Ba Carrier							
Y = Y Carrier							

ANALYTICAL REPORT

PREPARED FOR

Attn: James Thorne
Midwest Generation EME LLC
1800 Channahon Road
Joliet, Illinois 60436

Generated 11/21/25 14:15:45

JOB DESCRIPTION

Joliet #29 CCR

JOB NUMBER

500-277523-1

Eurofins Chicago

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Authorization



Generated
11/21/25 14:15:45

Authorized for release by
Dirk Nelson, Project Management Assistant II
Dirk.Nelson@et.eurofinsus.com
(708)534-5200

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Case Narrative

Client: Midwest Generation EME LLC
Project: Joliet #29 CCR

Job ID: 500-277523-1

Job ID: 500-277523-1

Eurofins Chicago

Job Narrative 500-277523-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 11/6/2025 2:40 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 4.1°C and 4.7°C.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Field Service / Mobile Lab

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Chicago

Method Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CHI
7470A	Mercury (CVAA)	SW846	EET CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CHI
SM 4500 Cl- E	Chloride, Total	SM	EET CHI
SM 4500 F C	Fluoride	SM	EET CHI
SM 4500 SO4 E	Sulfate, Total	SM	EET CHI
Field Sampling	Field Sampling	EPA	EET CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CHI
7470A	Preparation, Mercury	SW846	EET CHI

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200

Sample Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
500-277523-1	MW-03	Water	11/06/25 13:18	11/06/25 14:40	Illinois
500-277523-2	MW-04	Water	11/06/25 12:00	11/06/25 14:40	Illinois
500-277523-3	MW-05	Water	11/06/25 09:19	11/06/25 14:40	Illinois
500-277523-4	MW-10	Water	11/06/25 10:42	11/06/25 14:40	Illinois
500-277523-5	Duplicate	Water	11/06/25 00:00	11/06/25 14:40	Illinois

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

Client Sample ID: MW-03

Lab Sample ID: 500-277523-1

Date Collected: 11/06/25 13:18

Matrix: Water

Date Received: 11/06/25 14:40

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<3.0		3.0		ug/L		11/13/25 17:04	11/14/25 16:33	1
Arsenic	1.3		1.0		ug/L		11/13/25 17:04	11/14/25 16:33	1
Barium	130		2.5		ug/L		11/13/25 17:04	11/14/25 16:33	1
Beryllium	<1.0		1.0		ug/L		11/13/25 17:04	11/14/25 16:33	1
Boron	380		50		ug/L		11/13/25 17:04	11/14/25 16:33	1
Cadmium	<0.50		0.50		ug/L		11/13/25 17:04	11/14/25 16:33	1
Calcium	130		0.20		mg/L		11/13/25 17:04	11/14/25 16:33	1
Chromium	<5.0		5.0		ug/L		11/13/25 17:04	11/14/25 16:33	1
Cobalt	<1.0		1.0		ug/L		11/13/25 17:04	11/14/25 16:33	1
Lead	<0.50		0.50		ug/L		11/13/25 17:04	11/14/25 16:33	1
Lithium	13		10		ug/L		11/13/25 17:04	11/14/25 16:33	1
Molybdenum	5.0		5.0		ug/L		11/13/25 17:04	11/14/25 16:33	1
Selenium	3.3		2.5		ug/L		11/13/25 17:04	11/14/25 16:33	1
Thallium	<2.0		2.0		ug/L		11/13/25 17:04	11/14/25 16:33	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20		ug/L		11/14/25 09:50	11/17/25 08:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1100		10		mg/L			11/10/25 05:09	1
Chloride (SM 4500 Cl- E)	300		20		mg/L			11/09/25 11:31	10
Fluoride (SM 4500 F C)	0.45		0.10		mg/L			11/12/25 15:40	1
Sulfate (SM 4500 SO4 E)	200		25		mg/L			11/11/25 09:48	5

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.07				SU			11/06/25 13:18	1
Field Temperature	58.5				Degrees F			11/06/25 13:18	1
Groundwater Elevation	505.33				ft			11/06/25 13:18	1
Oxidation Reduction Potential	293.7				millivolts			11/06/25 13:18	1
Oxygen, Dissolved	6.06				mg/L			11/06/25 13:18	1
Specific Conductance	1.860				mS/cm			11/06/25 13:18	1
Turbidity	1.85				NTU			11/06/25 13:18	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

Client Sample ID: MW-04

Lab Sample ID: 500-277523-2

Date Collected: 11/06/25 12:00

Matrix: Water

Date Received: 11/06/25 14:40

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<3.0		3.0		ug/L		11/13/25 17:04	11/14/25 16:44	1
Arsenic	1.2		1.0		ug/L		11/13/25 17:04	11/14/25 16:44	1
Barium	90		2.5		ug/L		11/13/25 17:04	11/14/25 16:44	1
Beryllium	<1.0		1.0		ug/L		11/13/25 17:04	11/14/25 16:44	1
Boron	330		50		ug/L		11/13/25 17:04	11/14/25 16:44	1
Cadmium	<0.50		0.50		ug/L		11/13/25 17:04	11/14/25 16:44	1
Calcium	120		0.20		mg/L		11/13/25 17:04	11/14/25 16:44	1
Chromium	<5.0		5.0		ug/L		11/13/25 17:04	11/14/25 16:44	1
Cobalt	4.6		1.0		ug/L		11/13/25 17:04	11/14/25 16:44	1
Lead	<0.50		0.50		ug/L		11/13/25 17:04	11/14/25 16:44	1
Lithium	14		10		ug/L		11/13/25 17:04	11/14/25 16:44	1
Molybdenum	6.2		5.0		ug/L		11/13/25 17:04	11/14/25 16:44	1
Selenium	<2.5		2.5		ug/L		11/13/25 17:04	11/14/25 16:44	1
Thallium	<2.0		2.0		ug/L		11/13/25 17:04	11/14/25 16:44	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20		ug/L		11/14/25 09:50	11/17/25 08:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	970		10		mg/L			11/10/25 05:12	1
Chloride (SM 4500 Cl- E)	250		20		mg/L			11/09/25 11:32	10
Fluoride (SM 4500 F C)	0.49		0.10		mg/L			11/12/25 15:44	1
Sulfate (SM 4500 SO4 E)	170		25		mg/L			11/11/25 09:48	5

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.01				SU			11/06/25 12:00	1
Field Temperature	59.9				Degrees F			11/06/25 12:00	1
Groundwater Elevation	505.27				ft			11/06/25 12:00	1
Oxidation Reduction Potential	269.2				millivolts			11/06/25 12:00	1
Oxygen, Dissolved	4.45				mg/L			11/06/25 12:00	1
Specific Conductance	1.698				mS/cm			11/06/25 12:00	1
Turbidity	3.22				NTU			11/06/25 12:00	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

Client Sample ID: MW-05

Lab Sample ID: 500-277523-3

Date Collected: 11/06/25 09:19

Matrix: Water

Date Received: 11/06/25 14:40

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<3.0		3.0		ug/L		11/13/25 17:04	11/14/25 16:47	1
Arsenic	<1.0		1.0		ug/L		11/13/25 17:04	11/14/25 16:47	1
Barium	67		2.5		ug/L		11/13/25 17:04	11/14/25 16:47	1
Beryllium	<1.0		1.0		ug/L		11/13/25 17:04	11/14/25 16:47	1
Boron	510		50		ug/L		11/13/25 17:04	11/14/25 16:47	1
Cadmium	<0.50		0.50		ug/L		11/13/25 17:04	11/14/25 16:47	1
Calcium	95		0.20		mg/L		11/13/25 17:04	11/14/25 16:47	1
Chromium	<5.0		5.0		ug/L		11/13/25 17:04	11/14/25 16:47	1
Cobalt	<1.0		1.0		ug/L		11/13/25 17:04	11/14/25 16:47	1
Lead	<0.50		0.50		ug/L		11/13/25 17:04	11/14/25 16:47	1
Lithium	15		10		ug/L		11/13/25 17:04	11/14/25 16:47	1
Molybdenum	5.1		5.0		ug/L		11/13/25 17:04	11/14/25 16:47	1
Selenium	<2.5		2.5		ug/L		11/13/25 17:04	11/14/25 16:47	1
Thallium	<2.0		2.0		ug/L		11/13/25 17:04	11/14/25 16:47	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20		ug/L		11/14/25 09:50	11/17/25 08:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	890		10		mg/L			11/10/25 05:14	1
Chloride (SM 4500 Cl- E)	200		20		mg/L			11/09/25 11:32	10
Fluoride (SM 4500 F C)	0.37		0.10		mg/L			11/12/25 15:47	1
Sulfate (SM 4500 SO4 E)	150		25		mg/L			11/11/25 09:49	5

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.04				SU			11/06/25 09:19	1
Field Temperature	56.7				Degrees F			11/06/25 09:19	1
Groundwater Elevation	504.81				ft			11/06/25 09:19	1
Oxidation Reduction Potential	271.3				millivolts			11/06/25 09:19	1
Oxygen, Dissolved	6.25				mg/L			11/06/25 09:19	1
Specific Conductance	1.420				mS/cm			11/06/25 09:19	1
Turbidity	14.4				NTU			11/06/25 09:19	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

Client Sample ID: MW-10

Lab Sample ID: 500-277523-4

Date Collected: 11/06/25 10:42

Matrix: Water

Date Received: 11/06/25 14:40

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<3.0		3.0		ug/L		11/13/25 17:04	11/14/25 16:49	1
Arsenic	<1.0		1.0		ug/L		11/13/25 17:04	11/14/25 16:49	1
Barium	50		2.5		ug/L		11/13/25 17:04	11/14/25 16:49	1
Beryllium	<1.0		1.0		ug/L		11/13/25 17:04	11/14/25 16:49	1
Boron	390		50		ug/L		11/13/25 17:04	11/14/25 16:49	1
Cadmium	<0.50		0.50		ug/L		11/13/25 17:04	11/14/25 16:49	1
Calcium	120		0.20		mg/L		11/13/25 17:04	11/14/25 16:49	1
Chromium	<5.0		5.0		ug/L		11/13/25 17:04	11/14/25 16:49	1
Cobalt	<1.0		1.0		ug/L		11/13/25 17:04	11/14/25 16:49	1
Lead	<0.50		0.50		ug/L		11/13/25 17:04	11/14/25 16:49	1
Lithium	13		10		ug/L		11/13/25 17:04	11/14/25 16:49	1
Molybdenum	6.8		5.0		ug/L		11/13/25 17:04	11/14/25 16:49	1
Selenium	<2.5		2.5		ug/L		11/13/25 17:04	11/14/25 16:49	1
Thallium	<2.0		2.0		ug/L		11/13/25 17:04	11/14/25 16:49	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.24		0.20		ug/L		11/14/25 09:50	11/17/25 08:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1000		10		mg/L			11/10/25 05:17	1
Chloride (SM 4500 Cl- E)	220		20		mg/L			11/09/25 11:32	10
Fluoride (SM 4500 F C)	0.45		0.10		mg/L			11/12/25 15:50	1
Sulfate (SM 4500 SO4 E)	170		25		mg/L			11/11/25 09:49	5

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.97				SU			11/06/25 10:42	1
Field Temperature	55.4				Degrees F			11/06/25 10:42	1
Groundwater Elevation	505.33				ft			11/06/25 10:42	1
Oxidation Reduction Potential	285.4				millivolts			11/06/25 10:42	1
Oxygen, Dissolved	6.68				mg/L			11/06/25 10:42	1
Specific Conductance	1.497				mS/cm			11/06/25 10:42	1
Turbidity	2.78				NTU			11/06/25 10:42	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

Client Sample ID: Duplicate

Lab Sample ID: 500-277523-5

Date Collected: 11/06/25 00:00

Matrix: Water

Date Received: 11/06/25 14:40

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<3.0		3.0		ug/L		11/13/25 17:04	11/14/25 16:56	1
Arsenic	<1.0		1.0		ug/L		11/13/25 17:04	11/14/25 16:56	1
Barium	66		2.5		ug/L		11/13/25 17:04	11/14/25 16:56	1
Beryllium	<1.0		1.0		ug/L		11/13/25 17:04	11/14/25 16:56	1
Boron	490		50		ug/L		11/13/25 17:04	11/14/25 16:56	1
Cadmium	<0.50		0.50		ug/L		11/13/25 17:04	11/14/25 16:56	1
Calcium	94		0.20		mg/L		11/13/25 17:04	11/14/25 16:56	1
Chromium	<5.0		5.0		ug/L		11/13/25 17:04	11/14/25 16:56	1
Cobalt	<1.0		1.0		ug/L		11/13/25 17:04	11/14/25 16:56	1
Lead	<0.50		0.50		ug/L		11/13/25 17:04	11/14/25 16:56	1
Lithium	15		10		ug/L		11/13/25 17:04	11/14/25 16:56	1
Molybdenum	<5.0		5.0		ug/L		11/13/25 17:04	11/14/25 16:56	1
Selenium	<2.5		2.5		ug/L		11/13/25 17:04	11/14/25 16:56	1
Thallium	<2.0		2.0		ug/L		11/13/25 17:04	11/14/25 16:56	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20		ug/L		11/14/25 09:50	11/17/25 08:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	890		10		mg/L			11/11/25 05:49	1
Chloride (SM 4500 Cl- E)	200		20		mg/L			11/09/25 11:33	10
Fluoride (SM 4500 F C)	0.37		0.10		mg/L			11/12/25 15:53	1
Sulfate (SM 4500 SO4 E)	150		25		mg/L			11/16/25 13:17	5

Definitions/Glossary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

Metals

Prep Batch: 843146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-277523-1	MW-03	Total Recoverable	Water	3005A	
500-277523-2	MW-04	Total Recoverable	Water	3005A	
500-277523-3	MW-05	Total Recoverable	Water	3005A	
500-277523-4	MW-10	Total Recoverable	Water	3005A	
500-277523-5	Duplicate	Total Recoverable	Water	3005A	
MB 500-843146/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-843146/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-277523-1 MS	MW-03	Total Recoverable	Water	3005A	
500-277523-1 MSD	MW-03	Total Recoverable	Water	3005A	
500-277523-1 DU	MW-03	Total Recoverable	Water	3005A	

Prep Batch: 843227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-277523-1	MW-03	Total/NA	Water	7470A	
500-277523-2	MW-04	Total/NA	Water	7470A	
500-277523-3	MW-05	Total/NA	Water	7470A	
500-277523-4	MW-10	Total/NA	Water	7470A	
500-277523-5	Duplicate	Total/NA	Water	7470A	
MB 500-843227/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-843227/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-277523-5 MS	Duplicate	Total/NA	Water	7470A	
500-277523-5 MSD	Duplicate	Total/NA	Water	7470A	
500-277523-5 DU	Duplicate	Total/NA	Water	7470A	

Analysis Batch: 843450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-277523-1	MW-03	Total Recoverable	Water	6020B	843146
500-277523-2	MW-04	Total Recoverable	Water	6020B	843146
500-277523-3	MW-05	Total Recoverable	Water	6020B	843146
500-277523-4	MW-10	Total Recoverable	Water	6020B	843146
500-277523-5	Duplicate	Total Recoverable	Water	6020B	843146
MB 500-843146/1-A	Method Blank	Total Recoverable	Water	6020B	843146
LCS 500-843146/2-A	Lab Control Sample	Total Recoverable	Water	6020B	843146
500-277523-1 MS	MW-03	Total Recoverable	Water	6020B	843146
500-277523-1 MSD	MW-03	Total Recoverable	Water	6020B	843146
500-277523-1 DU	MW-03	Total Recoverable	Water	6020B	843146

Analysis Batch: 843503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-277523-1	MW-03	Total/NA	Water	7470A	843227
500-277523-2	MW-04	Total/NA	Water	7470A	843227
500-277523-3	MW-05	Total/NA	Water	7470A	843227
500-277523-4	MW-10	Total/NA	Water	7470A	843227
500-277523-5	Duplicate	Total/NA	Water	7470A	843227
MB 500-843227/12-A	Method Blank	Total/NA	Water	7470A	843227
LCS 500-843227/13-A	Lab Control Sample	Total/NA	Water	7470A	843227
500-277523-5 MS	Duplicate	Total/NA	Water	7470A	843227
500-277523-5 MSD	Duplicate	Total/NA	Water	7470A	843227
500-277523-5 DU	Duplicate	Total/NA	Water	7470A	843227

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QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

General Chemistry

Analysis Batch: 842275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-277523-1	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-277523-2	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-277523-3	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-277523-4	MW-10	Total/NA	Water	SM 4500 Cl- E	
500-277523-5	Duplicate	Total/NA	Water	SM 4500 Cl- E	
MB 500-842275/58	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-842275/59	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 842360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-277523-1	MW-03	Total/NA	Water	SM 2540C	
500-277523-2	MW-04	Total/NA	Water	SM 2540C	
500-277523-3	MW-05	Total/NA	Water	SM 2540C	
500-277523-4	MW-10	Total/NA	Water	SM 2540C	
MB 500-842360/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-842360/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 842502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-277523-5	Duplicate	Total/NA	Water	SM 2540C	
MB 500-842502/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-842502/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 842578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-277523-1	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-277523-2	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-277523-3	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-277523-4	MW-10	Total/NA	Water	SM 4500 SO4 E	
MB 500-842578/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-842578/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 842913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-277523-1	MW-03	Total/NA	Water	SM 4500 F C	
500-277523-2	MW-04	Total/NA	Water	SM 4500 F C	
500-277523-3	MW-05	Total/NA	Water	SM 4500 F C	
500-277523-4	MW-10	Total/NA	Water	SM 4500 F C	
500-277523-5	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-842913/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-842913/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 843402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-277523-5	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-843402/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-843402/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

Field Service / Mobile Lab

Analysis Batch: 844410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-277523-1	MW-03	Total/NA	Water	Field Sampling	
500-277523-2	MW-04	Total/NA	Water	Field Sampling	
500-277523-3	MW-05	Total/NA	Water	Field Sampling	
500-277523-4	MW-10	Total/NA	Water	Field Sampling	

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-843146/1-A

Matrix: Water

Analysis Batch: 843450

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 843146

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<3.0		3.0		ug/L		11/13/25 17:04	11/14/25 16:29	1
Arsenic	<1.0		1.0		ug/L		11/13/25 17:04	11/14/25 16:29	1
Barium	<2.5		2.5		ug/L		11/13/25 17:04	11/14/25 16:29	1
Beryllium	<1.0		1.0		ug/L		11/13/25 17:04	11/14/25 16:29	1
Boron	<50		50		ug/L		11/13/25 17:04	11/14/25 16:29	1
Cadmium	<0.50		0.50		ug/L		11/13/25 17:04	11/14/25 16:29	1
Calcium	<0.20		0.20		mg/L		11/13/25 17:04	11/14/25 16:29	1
Chromium	<5.0		5.0		ug/L		11/13/25 17:04	11/14/25 16:29	1
Cobalt	<1.0		1.0		ug/L		11/13/25 17:04	11/14/25 16:29	1
Lead	<0.50		0.50		ug/L		11/13/25 17:04	11/14/25 16:29	1
Lithium	<10		10		ug/L		11/13/25 17:04	11/14/25 16:29	1
Molybdenum	<5.0		5.0		ug/L		11/13/25 17:04	11/14/25 16:29	1
Selenium	<2.5		2.5		ug/L		11/13/25 17:04	11/14/25 16:29	1
Thallium	<2.0		2.0		ug/L		11/13/25 17:04	11/14/25 16:29	1

Lab Sample ID: LCS 500-843146/2-A

Matrix: Water

Analysis Batch: 843450

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 843146

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	500	509		ug/L		102	80 - 120
Arsenic	100	98.2		ug/L		98	80 - 120
Barium	500	489		ug/L		98	80 - 120
Beryllium	50.0	48.3		ug/L		97	80 - 120
Boron	1000	970		ug/L		97	80 - 120
Cadmium	50.0	49.3		ug/L		99	80 - 120
Calcium	10.0	8.82		mg/L		88	80 - 120
Chromium	200	189		ug/L		94	80 - 120
Cobalt	500	496		ug/L		99	80 - 120
Lead	100	96.0		ug/L		96	80 - 120
Lithium	100	99.8		ug/L		100	80 - 120
Molybdenum	1000	1020		ug/L		102	80 - 120
Selenium	100	103		ug/L		103	80 - 120
Thallium	100	97.4		ug/L		97	80 - 120

Lab Sample ID: 500-277523-1 MS

Matrix: Water

Analysis Batch: 843450

Client Sample ID: MW-03

Prep Type: Total Recoverable

Prep Batch: 843146

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<3.0		500	545		ug/L		109	75 - 125
Arsenic	1.3		100	103		ug/L		101	75 - 125
Barium	130		500	641		ug/L		101	75 - 125
Beryllium	<1.0		50.0	49.2		ug/L		98	75 - 125
Boron	380		1000	1400		ug/L		102	75 - 125
Cadmium	<0.50		50.0	51.3		ug/L		103	75 - 125
Calcium	130		10.0	141	4	mg/L		98	75 - 125
Chromium	<5.0		200	196		ug/L		97	75 - 125
Cobalt	<1.0		500	505		ug/L		101	75 - 125

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QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-277523-1 MS

Matrix: Water

Analysis Batch: 843450

Client Sample ID: MW-03

Prep Type: Total Recoverable

Prep Batch: 843146

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	<0.50		100	101		ug/L		101	75 - 125
Lithium	13		100	114		ug/L		101	75 - 125
Molybdenum	5.0		1000	1100		ug/L		109	75 - 125
Selenium	3.3		100	108		ug/L		104	75 - 125
Thallium	<2.0		100	103		ug/L		103	75 - 125

Lab Sample ID: 500-277523-1 MSD

Matrix: Water

Analysis Batch: 843450

Client Sample ID: MW-03

Prep Type: Total Recoverable

Prep Batch: 843146

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<3.0		500	571		ug/L		114	75 - 125	5	20
Arsenic	1.3		100	104		ug/L		103	75 - 125	2	20
Barium	130		500	667		ug/L		107	75 - 125	4	20
Beryllium	<1.0		50.0	51.5		ug/L		103	75 - 125	5	20
Boron	380		1000	1450		ug/L		107	75 - 125	4	20
Cadmium	<0.50		50.0	53.5		ug/L		107	75 - 125	4	20
Calcium	130		10.0	149	4	mg/L		175	75 - 125	5	20
Chromium	<5.0		200	202		ug/L		100	75 - 125	3	20
Cobalt	<1.0		500	521		ug/L		104	75 - 125	3	20
Lead	<0.50		100	104		ug/L		104	75 - 125	4	20
Lithium	13		100	118		ug/L		105	75 - 125	4	20
Molybdenum	5.0		1000	1130		ug/L		113	75 - 125	3	20
Selenium	3.3		100	107		ug/L		104	75 - 125	0	20
Thallium	<2.0		100	104		ug/L		104	75 - 125	1	20

Lab Sample ID: 500-277523-1 DU

Matrix: Water

Analysis Batch: 843450

Client Sample ID: MW-03

Prep Type: Total Recoverable

Prep Batch: 843146

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<3.0		<3.0		ug/L		NC	20
Arsenic	1.3		1.17		ug/L		10	20
Barium	130		135		ug/L		0.2	20
Beryllium	<1.0		<1.0		ug/L		NC	20
Boron	380		368		ug/L		3	20
Cadmium	<0.50		<0.50		ug/L		NC	20
Calcium	130		131		mg/L		0.4	20
Chromium	<5.0		<5.0		ug/L		NC	20
Cobalt	<1.0		<1.0		ug/L		NC	20
Lead	<0.50		<0.50		ug/L		NC	20
Lithium	13		13.1		ug/L		1	20
Molybdenum	5.0		<5.0		ug/L		NC	20
Selenium	3.3		3.28		ug/L		0	20
Thallium	<2.0		<2.0		ug/L		NC	20

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QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-843227/12-A
Matrix: Water
Analysis Batch: 843503

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 843227

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20		ug/L		11/14/25 09:50	11/17/25 08:37	1

Lab Sample ID: LCS 500-843227/13-A
Matrix: Water
Analysis Batch: 843503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 843227

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.00	2.10		ug/L		105	80 - 120

Lab Sample ID: 500-277523-5 MS
Matrix: Water
Analysis Batch: 843503

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 843227

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.20		1.00	1.04		ug/L		89	75 - 125

Lab Sample ID: 500-277523-5 MSD
Matrix: Water
Analysis Batch: 843503

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 843227

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.20		1.00	1.03		ug/L		87	75 - 125	1	20

Lab Sample ID: 500-277523-5 DU
Matrix: Water
Analysis Batch: 843503

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 843227

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	<0.20		<0.20		ug/L		NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-842360/1
Matrix: Water
Analysis Batch: 842360

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			11/10/25 04:18	1

Lab Sample ID: LCS 500-842360/2
Matrix: Water
Analysis Batch: 842360

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	258		mg/L		103	80 - 120

Eurofins Chicago

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: MB 500-842502/1

Matrix: Water

Analysis Batch: 842502

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			11/11/25 05:18	1

Lab Sample ID: LCS 500-842502/2

Matrix: Water

Analysis Batch: 842502

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	272		mg/L		109	80 - 120

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-842275/58

Matrix: Water

Analysis Batch: 842275

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			11/09/25 11:15	1

Lab Sample ID: LCS 500-842275/59

Matrix: Water

Analysis Batch: 842275

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	20.5		mg/L		102	85 - 115

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-842913/3

Matrix: Water

Analysis Batch: 842913

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			11/12/25 14:53	1

Lab Sample ID: LCS 500-842913/4

Matrix: Water

Analysis Batch: 842913

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	9.79		mg/L		98	90 - 119

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-842578/16

Matrix: Water

Analysis Batch: 842578

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			11/11/25 09:22	1

Eurofins Chicago

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: LCS 500-842578/17
Matrix: Water
Analysis Batch: 842578

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	20.0	21.3		mg/L		107	88 - 123

Lab Sample ID: MB 500-843402/16
Matrix: Water
Analysis Batch: 843402

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			11/16/25 13:02	1

Lab Sample ID: LCS 500-843402/17
Matrix: Water
Analysis Batch: 843402

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	20.0	20.3		mg/L		102	88 - 123

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-277523-1

Login Number: 277523

List Source: Eurofins Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.1,4.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Chicago

Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

Client Sample ID: MW-03

Lab Sample ID: 500-277523-1

Date Collected: 11/06/25 13:18

Matrix: Water

Date Received: 11/06/25 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			843146	MS	EET CHI	11/13/25 17:04 - 11/13/25 23:04 ¹
Total Recoverable	Analysis	6020B		1	843450	RN	EET CHI	11/14/25 16:33
Total/NA	Prep	7470A			843227	MJG	EET CHI	11/14/25 09:50 - 11/14/25 11:50 ¹
Total/NA	Analysis	7470A		1	843503	MJG	EET CHI	11/17/25 08:41
Total/NA	Analysis	SM 2540C		1	842360	CLB	EET CHI	11/10/25 05:09
Total/NA	Analysis	SM 4500 Cl- E		10	842275	TR	EET CHI	11/09/25 11:31
Total/NA	Analysis	SM 4500 F C		1	842913	AC	EET CHI	11/12/25 15:40
Total/NA	Analysis	SM 4500 SO4 E		5	842578	TR	EET CHI	11/11/25 09:48
Total/NA	Analysis	Field Sampling		1	844410	DN	EET CHI	11/06/25 13:18

Client Sample ID: MW-04

Lab Sample ID: 500-277523-2

Date Collected: 11/06/25 12:00

Matrix: Water

Date Received: 11/06/25 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			843146	MS	EET CHI	11/13/25 17:04 - 11/13/25 23:04 ¹
Total Recoverable	Analysis	6020B		1	843450	RN	EET CHI	11/14/25 16:44
Total/NA	Prep	7470A			843227	MJG	EET CHI	11/14/25 09:50 - 11/14/25 11:50 ¹
Total/NA	Analysis	7470A		1	843503	MJG	EET CHI	11/17/25 08:43
Total/NA	Analysis	SM 2540C		1	842360	CLB	EET CHI	11/10/25 05:12
Total/NA	Analysis	SM 4500 Cl- E		10	842275	TR	EET CHI	11/09/25 11:32
Total/NA	Analysis	SM 4500 F C		1	842913	AC	EET CHI	11/12/25 15:44
Total/NA	Analysis	SM 4500 SO4 E		5	842578	TR	EET CHI	11/11/25 09:48
Total/NA	Analysis	Field Sampling		1	844410	DN	EET CHI	11/06/25 12:00

Client Sample ID: MW-05

Lab Sample ID: 500-277523-3

Date Collected: 11/06/25 09:19

Matrix: Water

Date Received: 11/06/25 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			843146	MS	EET CHI	11/13/25 17:04 - 11/13/25 23:04 ¹
Total Recoverable	Analysis	6020B		1	843450	RN	EET CHI	11/14/25 16:47
Total/NA	Prep	7470A			843227	MJG	EET CHI	11/14/25 09:50 - 11/14/25 11:50 ¹
Total/NA	Analysis	7470A		1	843503	MJG	EET CHI	11/17/25 08:45
Total/NA	Analysis	SM 2540C		1	842360	CLB	EET CHI	11/10/25 05:14
Total/NA	Analysis	SM 4500 Cl- E		10	842275	TR	EET CHI	11/09/25 11:32
Total/NA	Analysis	SM 4500 F C		1	842913	AC	EET CHI	11/12/25 15:47
Total/NA	Analysis	SM 4500 SO4 E		5	842578	TR	EET CHI	11/11/25 09:49
Total/NA	Analysis	Field Sampling		1	844410	DN	EET CHI	11/06/25 09:19

Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR

Job ID: 500-277523-1

Client Sample ID: MW-10

Lab Sample ID: 500-277523-4

Date Collected: 11/06/25 10:42

Matrix: Water

Date Received: 11/06/25 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			843146	MS	EET CHI	11/13/25 17:04 - 11/13/25 23:04 ¹
Total Recoverable	Analysis	6020B		1	843450	RN	EET CHI	11/14/25 16:49
Total/NA	Prep	7470A			843227	MJG	EET CHI	11/14/25 09:50 - 11/14/25 11:50 ¹
Total/NA	Analysis	7470A		1	843503	MJG	EET CHI	11/17/25 08:46
Total/NA	Analysis	SM 2540C		1	842360	CLB	EET CHI	11/10/25 05:17
Total/NA	Analysis	SM 4500 Cl- E		10	842275	TR	EET CHI	11/09/25 11:32
Total/NA	Analysis	SM 4500 F C		1	842913	AC	EET CHI	11/12/25 15:50
Total/NA	Analysis	SM 4500 SO4 E		5	842578	TR	EET CHI	11/11/25 09:49
Total/NA	Analysis	Field Sampling		1	844410	DN	EET CHI	11/06/25 10:42

Client Sample ID: Duplicate

Lab Sample ID: 500-277523-5

Date Collected: 11/06/25 00:00

Matrix: Water

Date Received: 11/06/25 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			843146	MS	EET CHI	11/13/25 17:04 - 11/13/25 23:04 ¹
Total Recoverable	Analysis	6020B		1	843450	RN	EET CHI	11/14/25 16:56
Total/NA	Prep	7470A			843227	MJG	EET CHI	11/14/25 09:50 - 11/14/25 11:50 ¹
Total/NA	Analysis	7470A		1	843503	MJG	EET CHI	11/17/25 08:48
Total/NA	Analysis	SM 2540C		1	842502	CLB	EET CHI	11/11/25 05:49
Total/NA	Analysis	SM 4500 Cl- E		10	842275	TR	EET CHI	11/09/25 11:33
Total/NA	Analysis	SM 4500 F C		1	842913	AC	EET CHI	11/12/25 15:53
Total/NA	Analysis	SM 4500 SO4 E		5	843402	TR	EET CHI	11/16/25 13:17

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200

Parameter Well	MW-03	MW-04	MW-05	MW-10	
Field pH		7.07	7.01	7.04	6.97
Field Temp (deg C)		14.7	15.5	13.7	13.0
Field Specific Conductance (mS/cm)		1.860	1.698	1.420	1.497
Dissolved Oxygen (mg/L)		6.06	4.45	6.25	6.68
Field Turbidity NTU		1.85	3.22	14.4	2.78
ORP (mV)		293.7	269.2	271.3	285.4
Groundwater Elevation (ft)		505.33	505.27	504.81	505.33
Description	Clear	Clear	Clear	Clear	
Sampling Method	Dedicated Bladder pump	Dedicated bladder pump	Dedicated bladder pump	Dedicated bladder pump	

ANALYTICAL REPORT

PREPARED FOR

Attn: James Thorne
Midwest Generation EME LLC
1800 Channahon Road
Joliet, Illinois 60436

Generated 12/8/2025 12:53:06 PM

JOB DESCRIPTION

Joliet #29 CCR (RAD)

JOB NUMBER

500-277523-2

Eurofins Chicago

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Authorization



Authorized for release by
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Case Narrative

Client: Midwest Generation EME LLC
Project: Joliet #29 CCR (RAD)

Job ID: 500-277523-2

Job ID: 500-277523-2

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Job Narrative 500-277523-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 11/6/2025 2:40 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 4.1°C and 4.7°C.

Gas Flow Proportional Counter

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Method Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-277523-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-277523-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
500-277523-1	MW-03	Water	11/06/25 13:18	11/06/25 14:40	Illinois
500-277523-2	MW-04	Water	11/06/25 12:00	11/06/25 14:40	Illinois
500-277523-3	MW-05	Water	11/06/25 09:19	11/06/25 14:40	Illinois
500-277523-4	MW-10	Water	11/06/25 10:42	11/06/25 14:40	Illinois
500-277523-5	Duplicate	Water	11/06/25 00:00	11/06/25 14:40	Illinois

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-277523-2

Client Sample ID: MW-03

Lab Sample ID: 500-277523-1

Date Collected: 11/06/25 13:18

Matrix: Water

Date Received: 11/06/25 14:40

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.102	U	0.123	0.124	1.00	0.201	pCi/L	11/10/25 08:24	12/04/25 09:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.4		30 - 110					11/10/25 08:24	12/04/25 09:50	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.642	U	0.448	0.452	1.00	0.679	pCi/L	11/10/25 08:30	12/03/25 12:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.4		30 - 110					11/10/25 08:30	12/03/25 12:17	1
Y Carrier	80.4		30 - 110					11/10/25 08:30	12/03/25 12:17	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.744		0.465	0.469	5.00	0.679	pCi/L		12/08/25 12:40	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-277523-2

Client Sample ID: MW-04

Lab Sample ID: 500-277523-2

Date Collected: 11/06/25 12:00

Matrix: Water

Date Received: 11/06/25 14:40

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.168	U	0.156	0.156	1.00	0.237	pCi/L	11/10/25 08:24	12/04/25 09:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.1		30 - 110					11/10/25 08:24	12/04/25 09:51	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.511	U	0.498	0.500	1.00	0.803	pCi/L	11/10/25 08:30	12/03/25 12:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.1		30 - 110					11/10/25 08:30	12/03/25 12:17	1
Y Carrier	78.5		30 - 110					11/10/25 08:30	12/03/25 12:17	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.679	U	0.522	0.524	5.00	0.803	pCi/L		12/08/25 12:40	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-277523-2

Client Sample ID: MW-05

Lab Sample ID: 500-277523-3

Date Collected: 11/06/25 09:19

Matrix: Water

Date Received: 11/06/25 14:40

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0966	U	0.140	0.141	1.00	0.239	pCi/L	11/10/25 08:24	12/04/25 09:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.6		30 - 110					11/10/25 08:24	12/04/25 09:51	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.405	U	0.443	0.445	1.00	0.723	pCi/L	11/10/25 08:30	12/03/25 12:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.6		30 - 110					11/10/25 08:30	12/03/25 12:16	1
Y Carrier	78.5		30 - 110					11/10/25 08:30	12/03/25 12:16	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.501	U	0.465	0.467	5.00	0.723	pCi/L		12/08/25 12:40	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-277523-2

Client Sample ID: MW-10

Lab Sample ID: 500-277523-4

Date Collected: 11/06/25 10:42

Matrix: Water

Date Received: 11/06/25 14:40

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.195	U	0.152	0.153	1.00	0.214	pCi/L	11/10/25 08:24	12/04/25 09:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					11/10/25 08:24	12/04/25 09:51	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.229	U	0.418	0.419	1.00	0.719	pCi/L	11/10/25 08:30	12/03/25 12:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					11/10/25 08:30	12/03/25 12:17	1
Y Carrier	78.5		30 - 110					11/10/25 08:30	12/03/25 12:17	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.424	U	0.445	0.446	5.00	0.719	pCi/L		12/08/25 12:40	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-277523-2

Client Sample ID: Duplicate

Lab Sample ID: 500-277523-5

Date Collected: 11/06/25 00:00

Matrix: Water

Date Received: 11/06/25 14:40

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.154	U	0.152	0.153	1.00	0.236	pCi/L	11/10/25 08:24	12/04/25 09:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.9		30 - 110					11/10/25 08:24	12/04/25 09:51	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.345	U	0.406	0.407	1.00	0.668	pCi/L	11/10/25 08:30	12/03/25 12:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.9		30 - 110					11/10/25 08:30	12/03/25 12:16	1
Y Carrier	76.6		30 - 110					11/10/25 08:30	12/03/25 12:16	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.499	U	0.434	0.435	5.00	0.668	pCi/L		12/08/25 12:40	1

Definitions/Glossary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-277523-2

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-277523-2

Rad

Prep Batch: 744606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-277523-1	MW-03	Total/NA	Water	PrecSep-21	
500-277523-2	MW-04	Total/NA	Water	PrecSep-21	
500-277523-3	MW-05	Total/NA	Water	PrecSep-21	
500-277523-4	MW-10	Total/NA	Water	PrecSep-21	
500-277523-5	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-744606/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-744606/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-277523-1 DU	MW-03	Total/NA	Water	PrecSep-21	

Prep Batch: 744607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-277523-1	MW-03	Total/NA	Water	PrecSep_0	
500-277523-2	MW-04	Total/NA	Water	PrecSep_0	
500-277523-3	MW-05	Total/NA	Water	PrecSep_0	
500-277523-4	MW-10	Total/NA	Water	PrecSep_0	
500-277523-5	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-744607/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-744607/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-277523-1 DU	MW-03	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-277523-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-744606/1-A

Matrix: Water

Analysis Batch: 747899

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 744606

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.08256	U	0.145	0.146	1.00	0.256	pCi/L	11/10/25 08:24	12/04/25 09:50	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.1		30 - 110					11/10/25 08:24	12/04/25 09:50	1

Lab Sample ID: LCS 160-744606/2-A

Matrix: Water

Analysis Batch: 747899

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 744606

Analyte		Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226		9.57	9.400		1.17	1.00	0.229	pCi/L	98	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits							
Ba Carrier	88.0		30 - 110							

Lab Sample ID: 500-277523-1 DU

Matrix: Water

Analysis Batch: 747899

Client Sample ID: MW-03

Prep Type: Total/NA

Prep Batch: 744606

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.102	U	0.1862	U	0.165	1.00	0.248	pCi/L	0.29	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	88.6		30 - 110							

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-744607/1-A

Matrix: Water

Analysis Batch: 747720

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 744607

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.08753	U	0.357	0.357	1.00	0.638	pCi/L	11/10/25 08:30	12/03/25 12:19	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.1		30 - 110					11/10/25 08:30	12/03/25 12:19	1
Y Carrier	84.5		30 - 110					11/10/25 08:30	12/03/25 12:19	1

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-277523-2

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-744607/2-A

Matrix: Water

Analysis Batch: 747720

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 744607

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	7.88	9.590		1.34	1.00	0.595	pCi/L	122	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	88.0		30 - 110
Y Carrier	82.6		30 - 110

Lab Sample ID: 500-277523-1 DU

Matrix: Water

Analysis Batch: 747765

Client Sample ID: MW-03

Prep Type: Total/NA

Prep Batch: 744607

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.642	U	0.9347		0.502	1.00	0.707	pCi/L	0.31	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	88.6		30 - 110
Y Carrier	78.9		30 - 110

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Ver: 10/10/2024 12/8/2025

Chain of Custody Record

[illegible]

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-277523-2

Login Number: 277523

List Source: Eurofins Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.1,4.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Chicago

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-277523-2

Login Number: 277523

List Number: 2

Creator: Worthington, Sierra M

List Source: Eurofins St. Louis

List Creation: 11/07/25 12:16 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Chicago

Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-277523-2

Client Sample ID: MW-03

Lab Sample ID: 500-277523-1

Date Collected: 11/06/25 13:18

Matrix: Water

Date Received: 11/06/25 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			744606	VLQ	EET SL	11/10/25 08:24
Total/NA	Analysis	903.0		1	747899	SWS	EET SL	12/04/25 09:50
Total/NA	Prep	PrecSep_0			744607	VLQ	EET SL	11/10/25 08:30
Total/NA	Analysis	904.0		1	747765	FLC	EET SL	12/03/25 12:17
Total/NA	Analysis	Ra226_Ra228		1	748417	CAH	EET SL	12/08/25 12:40

Client Sample ID: MW-04

Lab Sample ID: 500-277523-2

Date Collected: 11/06/25 12:00

Matrix: Water

Date Received: 11/06/25 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			744606	VLQ	EET SL	11/10/25 08:24
Total/NA	Analysis	903.0		1	747899	SWS	EET SL	12/04/25 09:51
Total/NA	Prep	PrecSep_0			744607	VLQ	EET SL	11/10/25 08:30
Total/NA	Analysis	904.0		1	747765	FLC	EET SL	12/03/25 12:17
Total/NA	Analysis	Ra226_Ra228		1	748417	CAH	EET SL	12/08/25 12:40

Client Sample ID: MW-05

Lab Sample ID: 500-277523-3

Date Collected: 11/06/25 09:19

Matrix: Water

Date Received: 11/06/25 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			744606	VLQ	EET SL	11/10/25 08:24
Total/NA	Analysis	903.0		1	747899	SWS	EET SL	12/04/25 09:51
Total/NA	Prep	PrecSep_0			744607	VLQ	EET SL	11/10/25 08:30
Total/NA	Analysis	904.0		1	747765	FLC	EET SL	12/03/25 12:16
Total/NA	Analysis	Ra226_Ra228		1	748417	CAH	EET SL	12/08/25 12:40

Client Sample ID: MW-10

Lab Sample ID: 500-277523-4

Date Collected: 11/06/25 10:42

Matrix: Water

Date Received: 11/06/25 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			744606	VLQ	EET SL	11/10/25 08:24
Total/NA	Analysis	903.0		1	747899	SWS	EET SL	12/04/25 09:51
Total/NA	Prep	PrecSep_0			744607	VLQ	EET SL	11/10/25 08:30
Total/NA	Analysis	904.0		1	747765	FLC	EET SL	12/03/25 12:17
Total/NA	Analysis	Ra226_Ra228		1	748417	CAH	EET SL	12/08/25 12:40

Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-277523-2

Client Sample ID: Duplicate
Date Collected: 11/06/25 00:00
Date Received: 11/06/25 14:40

Lab Sample ID: 500-277523-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			744606	VLQ	EET SL	11/10/25 08:24
Total/NA	Analysis	903.0		1	747899	SWS	EET SL	12/04/25 09:51
Total/NA	Prep	PrecSep_0			744607	VLQ	EET SL	11/10/25 08:30
Total/NA	Analysis	904.0		1	747765	FLC	EET SL	12/03/25 12:16
Total/NA	Analysis	Ra226_Ra228		1	748417	CAH	EET SL	12/08/25 12:40

Laboratory References:
EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Tracer/Carrier Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR (RAD)

Job ID: 500-277523-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
500-277523-1	MW-03	89.4	
500-277523-1 DU	MW-03	88.6	
500-277523-2	MW-04	89.1	
500-277523-3	MW-05	86.6	
500-277523-4	MW-10	88.0	
500-277523-5	Duplicate	88.9	
LCS 160-744606/2-A	Lab Control Sample	88.0	
MB 160-744606/1-A	Method Blank	86.1	
Tracer/Carrier Legend			
Ba = Ba Carrier			

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
500-277523-1	MW-03	89.4	80.4
500-277523-1 DU	MW-03	88.6	78.9
500-277523-2	MW-04	89.1	78.5
500-277523-3	MW-05	86.6	78.5
500-277523-4	MW-10	88.0	78.5
500-277523-5	Duplicate	88.9	76.6
LCS 160-744607/2-A	Lab Control Sample	88.0	82.6
MB 160-744607/1-A	Method Blank	86.1	84.5
Tracer/Carrier Legend			
Ba = Ba Carrier			
Y = Y Carrier			