

DATA SUMMARY POSTING

Station: Midwest Generation Joliet #29 Generating Station

Regulated Unit(s): Pond 2 (IEPA ID No. W1970450047-02)

In accordance with the new Ill. Adm. Code Title 35, Part 845: Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments (State CCR Rule) groundwater monitoring was completed during the 1st quarter 2023 which includes the entire list of parameters specified under Section 845.600(a)(1) and (b). Table 1 is a summary table of all available CCR monitoring data to date including any data generated previously as part of the Federal CCR Rule monitoring. In addition, Table 2 provides a summary of turbidity data which was collected as part of State CCR Rule requirements which is a data parameter that was not required under the Federal CCR Rule.

No background statistics or proposed Groundwater Protection Standards are included on these tables. The background statistics and Proposed Groundwater Protection Standards were submitted to Illinois Environmental Protection Agency (EPA) as part of the Application for Initial Operating Permit submitted October 31, 2021. Upon Illinois EPA approval of the Operating Permit and Proposed Groundwater Protection Standards, the approved comparison values will be included on the tables for subsequent data comparisons/evaluations.

Table 2. Turbidity Measurement Data, Midwest Generation, LLC, Joliet #29 Generating Station

| Well ID | Date | Turbidity (NTU) |
|-----------|------------|-----------------|
| MW-03 | 3/2/2021 | 0.45 |
| | 4/10/2021 | 22.9 |
| | 4/25/2021 | 2.40 |
| | 5/18/2021 | 2.53 |
| | 6/11/2021 | 2.34 |
| | 6/29/2021 | 2.86 |
| | 7/19/2021 | 37.40 |
| | 8/9/2021 | 2.71 |
| | 8/30/2021 | 5.70 |
| | 9/27/2021 | 10.27 |
| | 11/16/2021 | 0.80 |
| | 3/3/2022 | 0.00 |
| | 5/26/2022 | 4.26 |
| | 8/31/2022 | 4.10 |
| 11/9/2022 | 32.60 | |
| 2/28/2023 | 6.98 | |
| MW-04 | 3/2/2021 | 81.89 |
| | 4/10/2021 | 5.96 |
| | 4/25/2021 | 3.02 |
| | 5/18/2021 | 2.52 |
| | 6/11/2021 | 2.80 |
| | 6/29/2021 | 3.34 |
| | 7/19/2021 | 47.4 |
| | 8/9/2021 | 4.13 |
| | 8/30/2021 | 18.3 |
| | 9/27/2021 | 1.76 |
| | 11/16/2021 | 4.20 |
| | 3/3/2022 | 0.00 |
| | 5/26/2022 | 1.23 |
| | 8/31/2022 | 3.78 |
| 11/9/2022 | 43.50 | |
| 2/28/2023 | 62.10 | |
| MW-05 | 2/25/2021 | 1.57 |
| | 4/10/2021 | 8.36 |
| | 4/25/2021 | 2.42 |
| | 5/17/2021 | 5.20 |
| | 6/11/2021 | 14.22 |
| | 6/29/2021 | 5.33 |
| | 7/19/2021 | 26.9 |
| | 8/9/2021 | 3.69 |
| | 8/27/2021 | 8.70 |
| | 9/27/2021 | 14.92 |
| | 11/16/2021 | 8.84 |
| | 3/3/2022 | 3.25 |
| | 5/26/2022 | 1.28 |
| | 8/31/2022 | 8.87 |
| 11/9/2022 | 63.4 | |
| 2/28/2023 | 58.32 | |
| MW-10 | 3/2/2021 | 26.07 |
| | 4/10/2021 | 7.31 |
| | 4/25/2021 | 5.21 |
| | 5/18/2021 | 3.73 |
| | 6/11/2021 | 6.65 |
| | 6/29/2021 | 9.49 |
| | 7/19/2021 | 14.5 |
| | 8/9/2021 | 10.08 |
| | 8/30/2021 | 9.3 |
| | 9/27/2021 | 16.3 |
| | 11/16/2021 | 5.59 |
| | 3/3/2022 | 2.86 |
| | 5/26/2022 | 2.08 |
| | 8/31/2022 | 2.93 |
| 11/9/2022 | 19.6 | |
| 2/28/2023 | 17.13 | |

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: John Niedzwiecki
Midwest Generation EME LLC
1800 Channahon Road
Joliet, Illinois 60436

Generated 3/21/2023 8:08:59 AM

JOB DESCRIPTION

Joliet #29 CCR

JOB NUMBER

500-230034-1

Eurofins Chicago

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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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Case Narrative

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

Job ID: 500-230034-1

Job ID: 500-230034-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-230034-1

Comments

No additional comments.

Receipt

The samples were received on 3/1/2023 9:23 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 1.5° C and 1.7° C.

Metals

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

General Chemistry

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

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Method Summary

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

Job ID: 500-230034-1

| Method | Method Description | Protocol | Laboratory |
|---------------|--|----------|------------|
| 6020A | 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: 500-230034-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|------------------|--------|----------------|----------------|
| 500-230034-1 | MW-03 | Water | 02/28/23 09:26 | 03/01/23 09:23 |
| 500-230034-2 | MW-04 | Water | 02/28/23 10:32 | 03/01/23 09:23 |
| 500-230034-3 | MW-05 | Water | 02/28/23 11:31 | 03/01/23 09:23 |
| 500-230034-4 | MW-10 | Water | 02/28/23 15:35 | 03/01/23 09:23 |
| 500-230034-5 | Duplicate | Water | 02/28/23 00:00 | 03/01/23 09:23 |

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Client Sample Results

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

Job ID: 500-230034-1

Client Sample ID: MW-03

Lab Sample ID: 500-230034-1

Date Collected: 02/28/23 09:26

Matrix: Water

Date Received: 03/01/23 09:23

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|---------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:21 | 1 |
| Arsenic | 0.0014 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:21 | 1 |
| Barium | 0.12 | | 0.0025 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:21 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:21 | 1 |
| Boron | 0.30 | | 0.050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:21 | 1 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:21 | 1 |
| Calcium | 120 | | 0.20 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:21 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:21 | 1 |
| Cobalt | 0.0015 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:21 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:21 | 1 |
| Lithium | 0.011 | | 0.010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:21 | 1 |
| Molybdenum | <0.0050 | | 0.0050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:21 | 1 |
| Selenium | 0.0033 | | 0.0025 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:21 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:21 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/07/23 11:05 | 03/08/23 10:48 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|-------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 1000 | | 10 | | mg/L | | | 03/02/23 07:28 | 1 |
| Chloride (SM 4500 Cl- E) | 280 | | 40 | | mg/L | | | 03/09/23 12:29 | 20 |
| Fluoride (SM 4500 F C) | 0.37 | | 0.10 | | mg/L | | | 03/08/23 12:54 | 1 |
| Sulfate (SM 4500 SO4 E) | 160 | | 50 | | mg/L | | | 03/08/23 11:47 | 10 |

Client Sample Results

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

Job ID: 500-230034-1

Client Sample ID: MW-04
Date Collected: 02/28/23 10:32
Date Received: 03/01/23 09:23

Lab Sample ID: 500-230034-2
Matrix: Water

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------|---------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:45 | 1 |
| Arsenic | 0.0019 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:45 | 1 |
| Barium | 0.10 | | 0.0025 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:45 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:45 | 1 |
| Boron | 0.34 | | 0.050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:45 | 1 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:45 | 1 |
| Calcium | 120 | | 0.20 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:45 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:45 | 1 |
| Cobalt | 0.0078 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:45 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:45 | 1 |
| Lithium | 0.011 | | 0.010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:45 | 1 |
| Molybdenum | 0.0058 | | 0.0050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:45 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:45 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:45 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/07/23 11:05 | 03/08/23 10:50 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|-------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 1100 | | 10 | | mg/L | | | 03/02/23 07:31 | 1 |
| Chloride (SM 4500 Cl- E) | 280 | | 40 | | mg/L | | | 03/09/23 12:29 | 20 |
| Fluoride (SM 4500 F C) | 0.40 | | 0.10 | | mg/L | | | 03/08/23 12:54 | 1 |
| Sulfate (SM 4500 SO4 E) | 150 | | 50 | | mg/L | | | 03/08/23 11:47 | 10 |

Client Sample Results

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

Job ID: 500-230034-1

Client Sample ID: MW-05

Lab Sample ID: 500-230034-3

Date Collected: 02/28/23 11:31

Matrix: Water

Date Received: 03/01/23 09:23

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------|----------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:49 | 1 |
| Arsenic | 0.0019 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:49 | 1 |
| Barium | 0.080 | | 0.0025 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:49 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:49 | 1 |
| Boron | 0.60 | | 0.050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:49 | 1 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:49 | 1 |
| Calcium | 160 | | 0.20 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:49 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:49 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:49 | 1 |
| Lead | 0.00084 | | 0.00050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:49 | 1 |
| Lithium | 0.013 | | 0.010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:49 | 1 |
| Molybdenum | 0.011 | | 0.0050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:49 | 1 |
| Selenium | 0.022 | | 0.0025 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:49 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:49 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/07/23 11:05 | 03/08/23 11:00 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|-------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 980 | | 10 | | mg/L | | | 03/02/23 07:33 | 1 |
| Chloride (SM 4500 Cl- E) | 130 | | 40 | | mg/L | | | 03/09/23 12:29 | 20 |
| Fluoride (SM 4500 F C) | 0.35 | | 0.10 | | mg/L | | | 03/08/23 12:54 | 1 |
| Sulfate (SM 4500 SO4 E) | 260 | | 50 | | mg/L | | | 03/08/23 11:47 | 10 |

Client Sample Results

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

Job ID: 500-230034-1

Client Sample ID: MW-10

Lab Sample ID: 500-230034-4

Date Collected: 02/28/23 15:35

Matrix: Water

Date Received: 03/01/23 09:23

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------|---------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:52 | 1 |
| Arsenic | 0.0012 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:52 | 1 |
| Barium | 0.053 | | 0.0025 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:52 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:52 | 1 |
| Boron | 0.36 | | 0.050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:52 | 1 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:52 | 1 |
| Calcium | 130 | | 0.20 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:52 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:52 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:52 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:52 | 1 |
| Lithium | 0.013 | | 0.010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:52 | 1 |
| Molybdenum | 0.0058 | | 0.0050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:52 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:52 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:52 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/07/23 11:05 | 03/08/23 11:02 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|-------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 1200 | | 10 | | mg/L | | | 03/02/23 07:36 | 1 |
| Chloride (SM 4500 Cl- E) | 330 | | 40 | | mg/L | | | 03/09/23 12:48 | 20 |
| Fluoride (SM 4500 F C) | 0.38 | | 0.10 | | mg/L | | | 03/08/23 12:54 | 1 |
| Sulfate (SM 4500 SO4 E) | 170 | | 50 | | mg/L | | | 03/08/23 11:48 | 10 |

Client Sample Results

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

Job ID: 500-230034-1

Client Sample ID: Duplicate

Lab Sample ID: 500-230034-5

Date Collected: 02/28/23 00:00

Matrix: Water

Date Received: 03/01/23 09:23

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|---------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:56 | 1 |
| Arsenic | 0.0019 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:56 | 1 |
| Barium | 0.12 | | 0.0025 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:56 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:56 | 1 |
| Boron | 0.30 | | 0.050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:56 | 1 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:56 | 1 |
| Calcium | 130 | | 0.20 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:56 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:56 | 1 |
| Cobalt | 0.0014 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:56 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:56 | 1 |
| Lithium | 0.012 | | 0.010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:56 | 1 |
| Molybdenum | <0.0050 | | 0.0050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:56 | 1 |
| Selenium | 0.0031 | | 0.0025 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:56 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:56 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/07/23 11:05 | 03/08/23 11:04 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|-------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 1100 | | 10 | | mg/L | | | 03/02/23 07:38 | 1 |
| Chloride (SM 4500 Cl- E) | 280 | | 40 | | mg/L | | | 03/09/23 12:30 | 20 |
| Fluoride (SM 4500 F C) | 0.36 | | 0.10 | | mg/L | | | 03/08/23 12:54 | 1 |
| Sulfate (SM 4500 SO4 E) | 160 | | 50 | | mg/L | | | 03/08/23 11:49 | 10 |

Definitions/Glossary

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

Job ID: 500-230034-1

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. |
|----------------|---|
| α | 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: 500-230034-1

Metals

Prep Batch: 701436

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-230034-1 | MW-03 | Total/NA | Water | 7470A | |
| 500-230034-2 | MW-04 | Total/NA | Water | 7470A | |
| 500-230034-3 | MW-05 | Total/NA | Water | 7470A | |
| 500-230034-4 | MW-10 | Total/NA | Water | 7470A | |
| 500-230034-5 | Duplicate | Total/NA | Water | 7470A | |
| MB 500-701436/12-A | Method Blank | Total/NA | Water | 7470A | |
| LCS 500-701436/13-A | Lab Control Sample | Total/NA | Water | 7470A | |

Prep Batch: 701480

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-------------------|--------|--------|------------|
| 500-230034-1 | MW-03 | Total Recoverable | Water | 3005A | |
| 500-230034-2 | MW-04 | Total Recoverable | Water | 3005A | |
| 500-230034-3 | MW-05 | Total Recoverable | Water | 3005A | |
| 500-230034-4 | MW-10 | Total Recoverable | Water | 3005A | |
| 500-230034-5 | Duplicate | Total Recoverable | Water | 3005A | |
| MB 500-701480/1-A | Method Blank | Total Recoverable | Water | 3005A | |
| LCS 500-701480/2-A | Lab Control Sample | Total Recoverable | Water | 3005A | |
| 500-230034-1 MS | MW-03 | Total Recoverable | Water | 3005A | |
| 500-230034-1 MSD | MW-03 | Total Recoverable | Water | 3005A | |
| 500-230034-1 DU | MW-03 | Total Recoverable | Water | 3005A | |

Analysis Batch: 701622

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 500-230034-1 | MW-03 | Total/NA | Water | 7470A | 701436 |
| 500-230034-2 | MW-04 | Total/NA | Water | 7470A | 701436 |
| 500-230034-3 | MW-05 | Total/NA | Water | 7470A | 701436 |
| 500-230034-4 | MW-10 | Total/NA | Water | 7470A | 701436 |
| 500-230034-5 | Duplicate | Total/NA | Water | 7470A | 701436 |
| MB 500-701436/12-A | Method Blank | Total/NA | Water | 7470A | 701436 |
| LCS 500-701436/13-A | Lab Control Sample | Total/NA | Water | 7470A | 701436 |

Analysis Batch: 701666

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-------------------|--------|--------|------------|
| 500-230034-1 | MW-03 | Total Recoverable | Water | 6020A | 701480 |
| 500-230034-2 | MW-04 | Total Recoverable | Water | 6020A | 701480 |
| 500-230034-3 | MW-05 | Total Recoverable | Water | 6020A | 701480 |
| 500-230034-4 | MW-10 | Total Recoverable | Water | 6020A | 701480 |
| 500-230034-5 | Duplicate | Total Recoverable | Water | 6020A | 701480 |
| MB 500-701480/1-A | Method Blank | Total Recoverable | Water | 6020A | 701480 |
| LCS 500-701480/2-A | Lab Control Sample | Total Recoverable | Water | 6020A | 701480 |
| 500-230034-1 MS | MW-03 | Total Recoverable | Water | 6020A | 701480 |
| 500-230034-1 MSD | MW-03 | Total Recoverable | Water | 6020A | 701480 |
| 500-230034-1 DU | MW-03 | Total Recoverable | Water | 6020A | 701480 |

General Chemistry

Analysis Batch: 700764

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|----------|------------|
| 500-230034-1 | MW-03 | Total/NA | Water | SM 2540C | |
| 500-230034-2 | MW-04 | Total/NA | Water | SM 2540C | |
| 500-230034-3 | 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: 500-230034-1

General Chemistry (Continued)

Analysis Batch: 700764 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|----------|------------|
| 500-230034-4 | MW-10 | Total/NA | Water | SM 2540C | |
| 500-230034-5 | Duplicate | Total/NA | Water | SM 2540C | |
| MB 500-700764/1 | Method Blank | Total/NA | Water | SM 2540C | |
| LCS 500-700764/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |

Analysis Batch: 701623

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|---------------|------------|
| 500-230034-1 | MW-03 | Total/NA | Water | SM 4500 SO4 E | |
| 500-230034-2 | MW-04 | Total/NA | Water | SM 4500 SO4 E | |
| 500-230034-3 | MW-05 | Total/NA | Water | SM 4500 SO4 E | |
| 500-230034-4 | MW-10 | Total/NA | Water | SM 4500 SO4 E | |
| 500-230034-5 | Duplicate | Total/NA | Water | SM 4500 SO4 E | |
| MB 500-701623/16 | Method Blank | Total/NA | Water | SM 4500 SO4 E | |
| LCS 500-701623/17 | Lab Control Sample | Total/NA | Water | SM 4500 SO4 E | |

Analysis Batch: 701685

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|-------------|------------|
| 500-230034-1 | MW-03 | Total/NA | Water | SM 4500 F C | |
| 500-230034-2 | MW-04 | Total/NA | Water | SM 4500 F C | |
| 500-230034-3 | MW-05 | Total/NA | Water | SM 4500 F C | |
| 500-230034-4 | MW-10 | Total/NA | Water | SM 4500 F C | |
| 500-230034-5 | Duplicate | Total/NA | Water | SM 4500 F C | |
| MB 500-701685/3 | Method Blank | Total/NA | Water | SM 4500 F C | |
| LCS 500-701685/4 | Lab Control Sample | Total/NA | Water | SM 4500 F C | |

Analysis Batch: 701820

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|---------------|------------|
| 500-230034-1 | MW-03 | Total/NA | Water | SM 4500 Cl- E | |
| 500-230034-2 | MW-04 | Total/NA | Water | SM 4500 Cl- E | |
| 500-230034-3 | MW-05 | Total/NA | Water | SM 4500 Cl- E | |
| 500-230034-4 | MW-10 | Total/NA | Water | SM 4500 Cl- E | |
| 500-230034-5 | Duplicate | Total/NA | Water | SM 4500 Cl- E | |
| MB 500-701820/16 | Method Blank | Total/NA | Water | SM 4500 Cl- E | |
| LCS 500-701820/17 | 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: 500-230034-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-701480/1-A
Matrix: Water
Analysis Batch: 701666

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 701480

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Antimony | <0.0030 | | 0.0030 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:14 | 1 |
| Arsenic | <0.0010 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:14 | 1 |
| Barium | <0.0025 | | 0.0025 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:14 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:14 | 1 |
| Boron | <0.050 | | 0.050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:14 | 1 |
| Cadmium | <0.00050 | | 0.00050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:14 | 1 |
| Calcium | <0.20 | | 0.20 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:14 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:14 | 1 |
| Cobalt | <0.0010 | | 0.0010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:14 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:14 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:14 | 1 |
| Molybdenum | <0.0050 | | 0.0050 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:14 | 1 |
| Selenium | <0.0025 | | 0.0025 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:14 | 1 |
| Thallium | <0.0020 | | 0.0020 | | mg/L | | 03/07/23 15:27 | 03/08/23 12:14 | 1 |

Lab Sample ID: LCS 500-701480/2-A
Matrix: Water
Analysis Batch: 701666

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 701480

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec |
|------------|-------------|------------|---------------|------|---|------|----------|
| | | | | | | | Limits |
| Antimony | 0.500 | 0.528 | | mg/L | | 106 | 80 - 120 |
| Arsenic | 0.100 | 0.0969 | | mg/L | | 97 | 80 - 120 |
| Barium | 2.00 | 2.02 | | mg/L | | 101 | 80 - 120 |
| Beryllium | 0.0500 | 0.0481 | | mg/L | | 96 | 80 - 120 |
| Boron | 1.00 | 0.996 | | mg/L | | 100 | 80 - 120 |
| Cadmium | 0.0500 | 0.0497 | | mg/L | | 99 | 80 - 120 |
| Calcium | 10.0 | 10.2 | | mg/L | | 102 | 80 - 120 |
| Chromium | 0.200 | 0.205 | | mg/L | | 102 | 80 - 120 |
| Cobalt | 0.500 | 0.509 | | mg/L | | 102 | 80 - 120 |
| Lead | 0.100 | 0.103 | | mg/L | | 103 | 80 - 120 |
| Lithium | 0.500 | 0.488 | | mg/L | | 98 | 80 - 120 |
| Molybdenum | 1.00 | 0.975 | | mg/L | | 97 | 80 - 120 |
| Selenium | 0.100 | 0.100 | | mg/L | | 100 | 80 - 120 |
| Thallium | 0.100 | 0.103 | | mg/L | | 103 | 80 - 120 |

Lab Sample ID: 500-230034-1 MS
Matrix: Water
Analysis Batch: 701666

Client Sample ID: MW-03
Prep Type: Total Recoverable
Prep Batch: 701480

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec |
|-----------|---------------|------------------|-------------|-----------|--------------|------|---|------|----------|
| | | | | | | | | | Limits |
| Antimony | <0.0030 | | 0.500 | 0.554 | | mg/L | | 111 | 75 - 125 |
| Arsenic | 0.0014 | | 0.100 | 0.105 | | mg/L | | 104 | 75 - 125 |
| Barium | 0.12 | | 2.00 | 2.14 | | mg/L | | 101 | 75 - 125 |
| Beryllium | <0.0010 | | 0.0500 | 0.0468 | | mg/L | | 94 | 75 - 125 |
| Boron | 0.30 | | 1.00 | 1.26 | | mg/L | | 96 | 75 - 125 |
| Cadmium | <0.00050 | | 0.0500 | 0.0500 | | mg/L | | 100 | 75 - 125 |
| Calcium | 120 | | 10.0 | 132 | 4 | mg/L | | 72 | 75 - 125 |
| Chromium | <0.0050 | | 0.200 | 0.198 | | mg/L | | 98 | 75 - 125 |
| Cobalt | 0.0015 | | 0.500 | 0.475 | | mg/L | | 95 | 75 - 125 |

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QC Sample Results

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

Job ID: 500-230034-1

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

Lab Sample ID: 500-230034-1 MS
Matrix: Water
Analysis Batch: 701666

Client Sample ID: MW-03
Prep Type: Total Recoverable
Prep Batch: 701480

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|------------|---------------|------------------|-------------|-----------|--------------|------|---|------|-------------|
| Lead | <0.00050 | | 0.100 | 0.101 | | mg/L | | 101 | 75 - 125 |
| Lithium | 0.011 | | 0.500 | 0.472 | | mg/L | | 92 | 75 - 125 |
| Molybdenum | <0.0050 | | 1.00 | 1.03 | | mg/L | | 102 | 75 - 125 |
| Selenium | 0.0033 | | 0.100 | 0.110 | | mg/L | | 106 | 75 - 125 |
| Thallium | <0.0020 | | 0.100 | 0.101 | | mg/L | | 101 | 75 - 125 |

Lab Sample ID: 500-230034-1 MSD
Matrix: Water
Analysis Batch: 701666

Client Sample ID: MW-03
Prep Type: Total Recoverable
Prep Batch: 701480

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|------------|---------------|------------------|-------------|------------|---------------|------|---|------|-------------|-----|-----------|
| Antimony | <0.0030 | | 0.500 | 0.563 | | mg/L | | 113 | 75 - 125 | 2 | 20 |
| Arsenic | 0.0014 | | 0.100 | 0.107 | | mg/L | | 105 | 75 - 125 | 2 | 20 |
| Barium | 0.12 | | 2.00 | 2.16 | | mg/L | | 102 | 75 - 125 | 1 | 20 |
| Beryllium | <0.0010 | | 0.0500 | 0.0470 | | mg/L | | 94 | 75 - 125 | 0 | 20 |
| Boron | 0.30 | | 1.00 | 1.29 | | mg/L | | 99 | 75 - 125 | 2 | 20 |
| Cadmium | <0.00050 | | 0.0500 | 0.0503 | | mg/L | | 101 | 75 - 125 | 1 | 20 |
| Calcium | 120 | | 10.0 | 132 | 4 | mg/L | | 77 | 75 - 125 | 0 | 20 |
| Chromium | <0.0050 | | 0.200 | 0.199 | | mg/L | | 99 | 75 - 125 | 1 | 20 |
| Cobalt | 0.0015 | | 0.500 | 0.480 | | mg/L | | 96 | 75 - 125 | 1 | 20 |
| Lead | <0.00050 | | 0.100 | 0.101 | | mg/L | | 101 | 75 - 125 | 0 | 20 |
| Lithium | 0.011 | | 0.500 | 0.480 | | mg/L | | 94 | 75 - 125 | 2 | 20 |
| Molybdenum | <0.0050 | | 1.00 | 1.05 | | mg/L | | 104 | 75 - 125 | 2 | 20 |
| Selenium | 0.0033 | | 0.100 | 0.111 | | mg/L | | 108 | 75 - 125 | 1 | 20 |
| Thallium | <0.0020 | | 0.100 | 0.101 | | mg/L | | 101 | 75 - 125 | 0 | 20 |

Lab Sample ID: 500-230034-1 DU
Matrix: Water
Analysis Batch: 701666

Client Sample ID: MW-03
Prep Type: Total Recoverable
Prep Batch: 701480

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|------------|---------------|------------------|-----------|--------------|------|---|-----|-----------|
| Antimony | <0.0030 | | <0.0030 | | mg/L | | NC | 20 |
| Arsenic | 0.0014 | | 0.00156 | | mg/L | | 14 | 20 |
| Barium | 0.12 | | 0.116 | | mg/L | | 2 | 20 |
| Beryllium | <0.0010 | | <0.0010 | | mg/L | | NC | 20 |
| Boron | 0.30 | | 0.297 | | mg/L | | 0 | 20 |
| Cadmium | <0.00050 | | <0.00050 | | mg/L | | NC | 20 |
| Calcium | 120 | | 122 | | mg/L | | 2 | 20 |
| Chromium | <0.0050 | | <0.0050 | | mg/L | | NC | 20 |
| Cobalt | 0.0015 | | 0.00141 | | mg/L | | 3 | 20 |
| Lead | <0.00050 | | <0.00050 | | mg/L | | NC | 20 |
| Lithium | 0.011 | | 0.0114 | | mg/L | | 0.6 | 20 |
| Molybdenum | <0.0050 | | <0.0050 | | mg/L | | NC | 20 |
| Selenium | 0.0033 | | 0.00323 | | mg/L | | 4 | 20 |
| Thallium | <0.0020 | | <0.0020 | | mg/L | | NC | 20 |

QC Sample Results

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

Job ID: 500-230034-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-701436/12-A
 Matrix: Water
 Analysis Batch: 701622

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 701436

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/07/23 11:05 | 03/08/23 10:09 | 1 |

Lab Sample ID: LCS 500-701436/13-A
 Matrix: Water
 Analysis Batch: 701622

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 701436

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Mercury | 0.00198 | 0.00198 | | mg/L | | 100 | 80 - 120 |

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

Lab Sample ID: MB 500-700764/1
 Matrix: Water
 Analysis Batch: 700764

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 | | | 03/02/23 06:42 | 1 |

Lab Sample ID: LCS 500-700764/2
 Matrix: Water
 Analysis Batch: 700764

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 | 240 | | mg/L | | 96 | 80 - 120 |

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-701820/16
 Matrix: Water
 Analysis Batch: 701820

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 | | | 03/09/23 12:25 | 1 |

Lab Sample ID: LCS 500-701820/17
 Matrix: Water
 Analysis Batch: 701820

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 | 19.9 | | mg/L | | 99 | 85 - 115 |

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-701685/3
 Matrix: Water
 Analysis Batch: 701685

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 | | | 03/08/23 12:54 | 1 |

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QC Sample Results

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

Job ID: 500-230034-1

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 500-701685/4
 Matrix: Water
 Analysis Batch: 701685

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 | 10.4 | | mg/L | | 104 | 90 - 119 |

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-701623/16
 Matrix: Water
 Analysis Batch: 701623

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 | | | 03/08/23 11:44 | 1 |

Lab Sample ID: LCS 500-701623/17
 Matrix: Water
 Analysis Batch: 701623

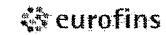
Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Sulfate | 20.0 | 21.5 | | mg/L | | 108 | 88 - 123 |

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 | | Lab PM | | Carrier Tracking No(s) | | COC No: | |
| Client Contact: Patrick Allenstein | | Phone | | Mockler Diana J | | E-Mail Diana.Mockler@et eurofinsus.com | | 500-110230-45941 1 | |
| Company KPRG and Associates Inc. | | PWSID | | Analysis Requested | | Job # | | 500-230034 | |
| Address: 14665 West Lisbon Road Suite 1A | | Due Date Requested: | | Field Filtered Sample (Yes or No) | | Perform N/MS/SD (Yes or No) | | Preservation Codes | |
| City Brookfield | | TAT Requested (days): | | 8010C, 6020A, 7470A | | 2540C, 4500_F_C, SM4600_CI_E, SM4600_S04_E | | A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Y Trizma Z other (specify) | |
| State, Zip WI, 53005 | | Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No | | PO #: 4502085968 | | WO #: | | Other | |
| Phone: 500-230034 COC | | Project #: 50011568 | | SSOW#: | | Total Number of Containers | | Special Instructions/Note: | |
| Email: patricka@kprginc.com | | Site: Illinois | | Sample Identification | | Sample Date | | Sample Time | |
| Project Name: Joliet #29 CCR/ Event Desc: Quarterly MWG Joliet #29 CCR | | Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air) | | Sample Type (C=Comp, G=grab) | | Preservation Code | | D N D | |
| 1 MW-03 | | 2-28-23 | | 09:26 | | G | | Water | |
| 2 MW-04 | | 2-28-23 | | 10:32 | | G | | Water | |
| 3 MW-05 | | 2-28-23 | | 11:31 | | G | | Water | |
| 4 MW-10 | | 2-28-23 | | 15:35 | | G | | Water | |
| 5 Duplicate | | 2-28-23 | | - | | G | | Water | |
| Possible Hazard Identification | | Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) | | Deliverable Requested I, II III IV Other (specify) | | Special Instructions/QC Requirements | | Empty Kit Relinquished by | |
| <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological | | <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months | | | | | | | |
| Date/Time: 3-1-23 09:23 | | Company: KPRG | | Received by: [Signature] | | Date/Time: 3/1/23 0923 | | Company: [Signature] | |
| Date/Time: | | Company: | | Received by: | | Date/Time: | | Company: | |
| Date/Time: | | Company: | | Received by: | | Date/Time: | | Company: | |
| Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No | | Custody Seal No | | Cooler Temperature(s) °C and Other Remarks | | 1.7-2/15, 1.9-2/12 | | | |



Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-230034-1

Login Number: 230034

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 | 1.5,1.7 |
| 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 <math><6\text{mm}</math> (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |



Lab Chronicle

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

Job ID: 500-230034-1

Client Sample ID: MW-03
Date Collected: 02/28/23 09:26
Date Received: 03/01/23 09:23

Lab Sample ID: 500-230034-1
Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-------------------|------------|---------------|-----|-----------------|--------------|---------|---------|--|
| Total Recoverable | Prep | 3005A | | | 701480 | RN | EET CHI | 03/07/23 15:27 - 03/07/23 15:57 ¹ |
| Total Recoverable | Analysis | 6020A | | 1 | 701666 | FXG | EET CHI | 03/08/23 12:21 |
| Total/NA | Prep | 7470A | | | 701436 | MJG | EET CHI | 03/07/23 11:05 - 03/07/23 13:05 ¹ |
| Total/NA | Analysis | 7470A | | 1 | 701622 | MJG | EET CHI | 03/08/23 10:48 |
| Total/NA | Analysis | SM 2540C | | 1 | 700764 | CLB | EET CHI | 03/02/23 07:28 |
| Total/NA | Analysis | SM 4500 CI- E | | 20 | 701820 | LP | EET CHI | 03/09/23 12:29 |
| Total/NA | Analysis | SM 4500 F C | | 1 | 701685 | EH | EET CHI | 03/08/23 12:54 |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 701623 | LP | EET CHI | 03/08/23 11:47 |

Client Sample ID: MW-04
Date Collected: 02/28/23 10:32
Date Received: 03/01/23 09:23

Lab Sample ID: 500-230034-2
Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-------------------|------------|---------------|-----|-----------------|--------------|---------|---------|--|
| Total Recoverable | Prep | 3005A | | | 701480 | RN | EET CHI | 03/07/23 15:27 - 03/07/23 15:57 ¹ |
| Total Recoverable | Analysis | 6020A | | 1 | 701666 | FXG | EET CHI | 03/08/23 12:45 |
| Total/NA | Prep | 7470A | | | 701436 | MJG | EET CHI | 03/07/23 11:05 - 03/07/23 13:05 ¹ |
| Total/NA | Analysis | 7470A | | 1 | 701622 | MJG | EET CHI | 03/08/23 10:50 |
| Total/NA | Analysis | SM 2540C | | 1 | 700764 | CLB | EET CHI | 03/02/23 07:31 |
| Total/NA | Analysis | SM 4500 CI- E | | 20 | 701820 | LP | EET CHI | 03/09/23 12:29 |
| Total/NA | Analysis | SM 4500 F C | | 1 | 701685 | EH | EET CHI | 03/08/23 12:54 |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 701623 | LP | EET CHI | 03/08/23 11:47 |

Client Sample ID: MW-05
Date Collected: 02/28/23 11:31
Date Received: 03/01/23 09:23

Lab Sample ID: 500-230034-3
Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-------------------|------------|---------------|-----|-----------------|--------------|---------|---------|--|
| Total Recoverable | Prep | 3005A | | | 701480 | RN | EET CHI | 03/07/23 15:27 - 03/07/23 15:57 ¹ |
| Total Recoverable | Analysis | 6020A | | 1 | 701666 | FXG | EET CHI | 03/08/23 12:49 |
| Total/NA | Prep | 7470A | | | 701436 | MJG | EET CHI | 03/07/23 11:05 - 03/07/23 13:05 ¹ |
| Total/NA | Analysis | 7470A | | 1 | 701622 | MJG | EET CHI | 03/08/23 11:00 |
| Total/NA | Analysis | SM 2540C | | 1 | 700764 | CLB | EET CHI | 03/02/23 07:33 |
| Total/NA | Analysis | SM 4500 CI- E | | 20 | 701820 | LP | EET CHI | 03/09/23 12:29 |
| Total/NA | Analysis | SM 4500 F C | | 1 | 701685 | EH | EET CHI | 03/08/23 12:54 |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 701623 | LP | EET CHI | 03/08/23 11:47 |

Client Sample ID: MW-10
Date Collected: 02/28/23 15:35
Date Received: 03/01/23 09:23

Lab Sample ID: 500-230034-4
Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-------------------|------------|--------------|-----|-----------------|--------------|---------|---------|--|
| Total Recoverable | Prep | 3005A | | | 701480 | RN | EET CHI | 03/07/23 15:27 - 03/07/23 15:57 ¹ |
| Total Recoverable | Analysis | 6020A | | 1 | 701666 | FXG | EET CHI | 03/08/23 12:52 |

Lab Chronicle

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

Job ID: 500-230034-1

Client Sample ID: MW-10
Date Collected: 02/28/23 15:35
Date Received: 03/01/23 09:23

Lab Sample ID: 500-230034-4
Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|---------------|-----|-----------------|--------------|---------|---------|--|
| Total/NA | Prep | 7470A | | | 701436 | MJG | EET CHI | 03/07/23 11:05 - 03/07/23 13:05 ¹ |
| Total/NA | Analysis | 7470A | | 1 | 701622 | MJG | EET CHI | 03/08/23 11:02 |
| Total/NA | Analysis | SM 2540C | | 1 | 700764 | CLB | EET CHI | 03/02/23 07:36 |
| Total/NA | Analysis | SM 4500 Cl- E | | 20 | 701820 | LP | EET CHI | 03/09/23 12:48 |
| Total/NA | Analysis | SM 4500 F C | | 1 | 701685 | EH | EET CHI | 03/08/23 12:54 |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 701623 | LP | EET CHI | 03/08/23 11:48 |

Client Sample ID: Duplicate
Date Collected: 02/28/23 00:00
Date Received: 03/01/23 09:23

Lab Sample ID: 500-230034-5
Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-------------------|------------|---------------|-----|-----------------|--------------|---------|---------|--|
| Total Recoverable | Prep | 3005A | | | 701480 | RN | EET CHI | 03/07/23 15:27 - 03/07/23 15:57 ¹ |
| Total Recoverable | Analysis | 6020A | | 1 | 701666 | FXG | EET CHI | 03/08/23 12:56 |
| Total/NA | Prep | 7470A | | | 701436 | MJG | EET CHI | 03/07/23 11:05 - 03/07/23 13:05 ¹ |
| Total/NA | Analysis | 7470A | | 1 | 701622 | MJG | EET CHI | 03/08/23 11:04 |
| Total/NA | Analysis | SM 2540C | | 1 | 700764 | CLB | EET CHI | 03/02/23 07:38 |
| Total/NA | Analysis | SM 4500 Cl- E | | 20 | 701820 | LP | EET CHI | 03/09/23 12:30 |
| Total/NA | Analysis | SM 4500 F C | | 1 | 701685 | EH | EET CHI | 03/08/23 12:54 |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 701623 | LP | EET CHI | 03/08/23 11:49 |

¹ Completion dates and times are reported or not reported per method requirements or individual lab discretion.

Laboratory References:

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

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: John Niedzwiecki
Midwest Generation EME LLC
1800 Channahon Road
Joliet, Illinois 60436

Generated 3/30/2023 8:15:35 AM

JOB DESCRIPTION

Joliet #29 CCR (RAD)

JOB NUMBER

500-230034-2

Eurofins Chicago

Job Notes

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Authorization



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3/30/2023 8:15:35 AM

Authorized for release by
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Case Narrative

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

Job ID: 500-230034-2

Job ID: 500-230034-2

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-230034-2

Receipt

The samples were received on 3/1/2023 9:23 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 1.5° C and 1.7° C.

RAD

Methods 903.0, 9315: Radium-226 batch 602324

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

MW-03 (500-230034-1), MW-04 (500-230034-2), MW-05 (500-230034-3), MW-10 (500-230034-4), Duplicate (500-230034-5), (LCS 160-602324/2-A), (MB 160-602324/1-A) and (500-230034-E-1-A DU)

Methods 904.0, 9320: Radium-228 batch 602331

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

MW-03 (500-230034-1), MW-04 (500-230034-2), MW-05 (500-230034-3), MW-10 (500-230034-4), Duplicate (500-230034-5), (LCS 160-602331/2-A), (MB 160-602331/1-A) and (500-230034-E-1-B DU)

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

Method Summary

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

Job ID: 500-230034-2

| 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: 500-230034-2

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|------------------|--------|----------------|----------------|
| 500-230034-1 | MW-03 | Water | 02/28/23 09:26 | 03/01/23 09:23 |
| 500-230034-2 | MW-04 | Water | 02/28/23 10:32 | 03/01/23 09:23 |
| 500-230034-3 | MW-05 | Water | 02/28/23 11:31 | 03/01/23 09:23 |
| 500-230034-4 | MW-10 | Water | 02/28/23 15:35 | 03/01/23 09:23 |
| 500-230034-5 | Duplicate | Water | 02/28/23 00:00 | 03/01/23 09:23 |

1

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Client Sample Results

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

Job ID: 500-230034-2

Client Sample ID: MW-03
Date Collected: 02/28/23 09:26
Date Received: 03/01/23 09:23

Lab Sample ID: 500-230034-1
Matrix: Water

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 | 0.106 | | 0.0684 | 0.0690 | 1.00 | 0.0879 | pCi/L | 03/03/23 11:25 | 03/27/23 21:12 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Ba Carrier | 82.8 | | 30 - 110 | | | | | 03/03/23 11:25 | 03/27/23 21:12 | 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 | 0.139 | U | 0.296 | 0.296 | 1.00 | 0.520 | pCi/L | 03/03/23 12:12 | 03/15/23 11:49 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Ba Carrier | 82.8 | | 30 - 110 | | | | | 03/03/23 12:12 | 03/15/23 11:49 | 1 |
| Y Carrier | 82.2 | | 30 - 110 | | | | | 03/03/23 12:12 | 03/15/23 11:49 | 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 | 0.245 | U | 0.304 | 0.304 | 5.00 | 0.520 | pCi/L | | 03/29/23 19:31 | 1 |

Client Sample Results

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

Job ID: 500-230034-2

Client Sample ID: MW-04

Lab Sample ID: 500-230034-2

Date Collected: 02/28/23 10:32

Matrix: Water

Date Received: 03/01/23 09:23

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 | 0.0986 | | 0.0679 | 0.0685 | 1.00 | 0.0896 | pCi/L | 03/03/23 11:25 | 03/27/23 21:12 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Ba Carrier | 78.8 | | 30 - 110 | | | | | 03/03/23 11:25 | 03/27/23 21:12 | 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 | 0.372 | U | 0.370 | 0.371 | 1.00 | 0.593 | pCi/L | 03/03/23 12:12 | 03/15/23 11:49 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Ba Carrier | 78.8 | | 30 - 110 | | | | | 03/03/23 12:12 | 03/15/23 11:49 | 1 |
| Y Carrier | 80.4 | | 30 - 110 | | | | | 03/03/23 12:12 | 03/15/23 11:49 | 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 | 0.470 | U | 0.376 | 0.377 | 5.00 | 0.593 | pCi/L | | 03/29/23 19:31 | 1 |

Client Sample Results

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

Job ID: 500-230034-2

Client Sample ID: MW-05
Date Collected: 02/28/23 11:31
Date Received: 03/01/23 09:23

Lab Sample ID: 500-230034-3
Matrix: Water

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 | 0.142 | | 0.0872 | 0.0882 | 1.00 | 0.115 | pCi/L | 03/03/23 11:25 | 03/28/23 13:14 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Ba Carrier | 72.6 | | 30 - 110 | | | | | 03/03/23 11:25 | 03/28/23 13:14 | 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 | 0.0982 | U | 0.380 | 0.380 | 1.00 | 0.685 | pCi/L | 03/03/23 12:12 | 03/15/23 11:51 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Ba Carrier | 72.6 | | 30 - 110 | | | | | 03/03/23 12:12 | 03/15/23 11:51 | 1 |
| Y Carrier | 80.0 | | 30 - 110 | | | | | 03/03/23 12:12 | 03/15/23 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 | 0.240 | U | 0.390 | 0.390 | 5.00 | 0.685 | pCi/L | | 03/29/23 19:31 | 1 |

Client Sample Results

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

Job ID: 500-230034-2

Client Sample ID: MW-10
Date Collected: 02/28/23 15:35
Date Received: 03/01/23 09:23

Lab Sample ID: 500-230034-4
Matrix: Water

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 | 0.0670 | U | 0.0718 | 0.0720 | 1.00 | 0.114 | pCi/L | 03/03/23 11:25 | 03/27/23 21:12 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Ba Carrier | 69.2 | | 30 - 110 | | | | | 03/03/23 11:25 | 03/27/23 21:12 | 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 | 0.106 | U | 0.441 | 0.441 | 1.00 | 0.787 | pCi/L | 03/03/23 12:12 | 03/15/23 11:52 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Ba Carrier | 69.2 | | 30 - 110 | | | | | 03/03/23 12:12 | 03/15/23 11:52 | 1 |
| Y Carrier | 84.5 | | 30 - 110 | | | | | 03/03/23 12:12 | 03/15/23 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 | 0.173 | U | 0.447 | 0.447 | 5.00 | 0.787 | pCi/L | | 03/29/23 19:31 | 1 |

Client Sample Results

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

Job ID: 500-230034-2

Client Sample ID: Duplicate

Lab Sample ID: 500-230034-5

Date Collected: 02/28/23 00:00

Matrix: Water

Date Received: 03/01/23 09:23

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 | 0.164 | | 0.0883 | 0.0895 | 1.00 | 0.105 | pCi/L | 03/03/23 11:25 | 03/27/23 21:12 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Ba Carrier | 72.6 | | 30 - 110 | | | | | 03/03/23 11:25 | 03/27/23 21:12 | 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 | 0.243 | U | 0.371 | 0.372 | 1.00 | 0.631 | pCi/L | 03/03/23 12:12 | 03/15/23 11:52 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Ba Carrier | 72.6 | | 30 - 110 | | | | | 03/03/23 12:12 | 03/15/23 11:52 | 1 |
| Y Carrier | 83.4 | | 30 - 110 | | | | | 03/03/23 12:12 | 03/15/23 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 | 0.406 | U | 0.381 | 0.383 | 5.00 | 0.631 | pCi/L | | 03/29/23 19:31 | 1 |

Definitions/Glossary

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

Job ID: 500-230034-2

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. |
|----------------|---|
| α | 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: 500-230034-2

Rad

Prep Batch: 602324

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|------------|------------|
| 500-230034-1 | MW-03 | Total/NA | Water | PrecSep-21 | |
| 500-230034-2 | MW-04 | Total/NA | Water | PrecSep-21 | |
| 500-230034-3 | MW-05 | Total/NA | Water | PrecSep-21 | |
| 500-230034-4 | MW-10 | Total/NA | Water | PrecSep-21 | |
| 500-230034-5 | Duplicate | Total/NA | Water | PrecSep-21 | |
| MB 160-602324/1-A | Method Blank | Total/NA | Water | PrecSep-21 | |
| LCS 160-602324/2-A | Lab Control Sample | Total/NA | Water | PrecSep-21 | |
| 500-230034-1 DU | MW-03 | Total/NA | Water | PrecSep-21 | |

Prep Batch: 602331

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|-----------|------------|
| 500-230034-1 | MW-03 | Total/NA | Water | PrecSep_0 | |
| 500-230034-2 | MW-04 | Total/NA | Water | PrecSep_0 | |
| 500-230034-3 | MW-05 | Total/NA | Water | PrecSep_0 | |
| 500-230034-4 | MW-10 | Total/NA | Water | PrecSep_0 | |
| 500-230034-5 | Duplicate | Total/NA | Water | PrecSep_0 | |
| MB 160-602331/1-A | Method Blank | Total/NA | Water | PrecSep_0 | |
| LCS 160-602331/2-A | Lab Control Sample | Total/NA | Water | PrecSep_0 | |
| 500-230034-1 DU | MW-03 | Total/NA | Water | PrecSep_0 | |

QC Sample Results

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

Job ID: 500-230034-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-602324/1-A
Matrix: Water
Analysis Batch: 605095

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602324

| Analyte | MB MB | | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|---------|-----------|-----------------|-----------------|------|----------------|----------------|----------------|----------------|---------|
| | Result | Qualifier | Uncert. (2σ+/-) | Uncert. (2σ+/-) | | | | | | |
| Radium-226 | 0.02066 | U | 0.0536 | 0.0537 | 1.00 | 0.0993 | pCi/L | 03/03/23 11:25 | 03/27/23 16:04 | 1 |
| Carrier | MB MB | | Limits | | | Prepared | Analyzed | Dil Fac | | |
| | %Yield | Qualifier | | | | | | | | |
| Ba Carrier | 91.0 | | 30 - 110 | | | 03/03/23 11:25 | 03/27/23 16:04 | 1 | | |

Lab Sample ID: LCS 160-602324/2-A
Matrix: Water
Analysis Batch: 605095

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602324

| Analyte | Spike Added | LCS Result | LCS Qual | Total | RL | MDC | Unit | %Rec | %Rec Limits |
|------------|-------------|---------------|----------|-----------------|------|----------|----------|---------|-------------|
| | | | | Uncert. (2σ+/-) | | | | | |
| Radium-226 | 11.3 | 11.64 | | 1.20 | 1.00 | 0.113 | pCi/L | 103 | 75 - 125 |
| Carrier | LCS %Yield | LCS Qualifier | Limits | | | Prepared | Analyzed | Dil Fac | |
| | | | | | | | | | |
| Ba Carrier | 81.9 | | 30 - 110 | | | | | | |

Lab Sample ID: 500-230034-1 DU
Matrix: Water
Analysis Batch: 605277

Client Sample ID: MW-03
Prep Type: Total/NA
Prep Batch: 602324

| Analyte | Sample Sample | | DU | DU | Total | RL | MDC | Unit | RER | RER Limit |
|------------|---------------|--------------|----------|------|-----------------|----------|----------|---------|------|-----------|
| | Result | Qual | Result | Qual | Uncert. (2σ+/-) | | | | | |
| Radium-226 | 0.106 | | 0.1378 | U | 0.0997 | 1.00 | 0.144 | pCi/L | 0.19 | 1 |
| Carrier | DU %Yield | DU Qualifier | Limits | | | Prepared | Analyzed | Dil Fac | | |
| | | | | | | | | | | |
| Ba Carrier | 71.2 | | 30 - 110 | | | | | | | |

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-602331/1-A
Matrix: Water
Analysis Batch: 603705

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602331

| Analyte | MB MB | | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------|-----------------|------|----------------|----------------|----------------|----------------|---------|
| | Result | Qualifier | Uncert. (2σ+/-) | Uncert. (2σ+/-) | | | | | | |
| Radium-228 | 0.6207 | | 0.332 | 0.337 | 1.00 | 0.457 | pCi/L | 03/03/23 12:12 | 03/15/23 11:40 | 1 |
| Carrier | MB MB | | Limits | | | Prepared | Analyzed | Dil Fac | | |
| | %Yield | Qualifier | | | | | | | | |
| Ba Carrier | 91.0 | | 30 - 110 | | | 03/03/23 12:12 | 03/15/23 11:40 | 1 | | |
| Y Carrier | 83.0 | | 30 - 110 | | | 03/03/23 12:12 | 03/15/23 11:40 | 1 | | |

QC Sample Results

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

Job ID: 500-230034-2

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-602331/2-A
Matrix: Water
Analysis Batch: 603705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602331

| Analyte | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits |
|----------------|---------------|------------------|---------------|-----------------------|------|-------|-------|------|-------------|
| Radium-228 | 8.12 | 8.960 | | 1.27 | 1.00 | 0.583 | pCi/L | 110 | 75 - 125 |
| LCS LCS | | | | | | | | | |
| Carrier | %Yield | Qualifier | Limits | | | | | | |
| Ba Carrier | 81.9 | | 30 - 110 | | | | | | |
| Y Carrier | 86.0 | | 30 - 110 | | | | | | |

Lab Sample ID: 500-230034-1 DU
Matrix: Water
Analysis Batch: 603705

Client Sample ID: MW-03
Prep Type: Total/NA
Prep Batch: 602331

| Analyte | Sample Result | Sample Qual | DU Result | DU Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | RER | RER Limit |
|----------------|---------------|------------------|---------------|---------|-----------------------|------|-------|-------|------|-----------|
| Radium-228 | 0.139 | U | -0.1753 | U | 0.276 | 1.00 | 0.594 | pCi/L | 0.55 | 1 |
| DU DU | | | | | | | | | | |
| Carrier | %Yield | Qualifier | Limits | | | | | | | |
| Ba Carrier | 71.2 | | 30 - 110 | | | | | | | |
| Y Carrier | 80.7 | | 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 | | Lab PM | | Carrier Tracking No(s) | | COC No: | | |
| Client Contact: Patrick Allenstein | | Phone | | Mockler Diana J | | E-Mail Diana.Mockler@et eurofinsus.com | | 500-110230-45941 1 | | |
| Company KPRG and Associates Inc. | | PWSID | | Analysis Requested | | Job # | | 500-230034 | | |
| Address: 14665 West Lisbon Road Suite 1A | | Due Date Requested: | | Field Filtered Sample (Yes or No) | | Perform N/MS/SD (Yes or No) | | Preservation Codes | | |
| City Brookfield | | TAT Requested (days): | | 8010C, 6020A, 7470A | | 2540C, 4500, F, C, SM4600, Cl, E, SM4600, SO4, E | | A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Y Trizma Z other (specify) | | |
| State, Zip WI, 53005 | | Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No | | PO #: 4502085968 | | 903.0, 904.0 | | Other | | |
| Phone: 500-230034 COC | | WO #: | | Project #: 50011568 | | SSOW#: | | Special Instructions/Note: | | |
| Email: patricka@kprginc.com | | Project Name: Joliet #29 CCR/ Event Desc: Quarterly MWG Joliet #29 CCR | | Site: Illinois | | Sample Identification | | Sample Date | | |
| | | Sample Time | | Sample Type (C=Comp, G=grab) | | Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air) | | Preservation Code | | |
| | | | | | | | | Total Number of Containers | | |
| | | | | | | | | D N D | | |
| 1 | | 2-28-23 09:26 | | G Water | | N N X X X | | 5 | | |
| 2 | | 2-28-23 10:32 | | G Water | | N N X X X | | 5 | | |
| 3 | | 2-28-23 11:31 | | G Water | | N N K X X | | 5 | | |
| 4 | | 2-28-23 15:35 | | G Water | | N N X X X | | 5 | | |
| 5 | | 2-28-23 - | | G Water | | N N X X X | | 5 | | |
| | | | | Water | | | | | | |
| Possible Hazard Identification | | | | | Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) | | | | | |
| <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological | | | | | <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months | | | | | |
| Deliverable Requested I, II III IV Other (specify) | | | | | Special Instructions/QC Requirements | | | | | |
| Empty Kit Relinquished by | | Date | | Time | | Method of Shipment: | | | | |
| Relinquished by <i>[Signature]</i> | | Date/Time: 3-1-23 09:23 | | Company: KPRG | | Received by <i>[Signature]</i> | | Date/Time: 3/1/23 0923 | | Company: KPRG |
| Relinquished by | | Date/Time: | | Company: | | Received by | | Date/Time: | | Company: |
| Relinquished by | | Date/Time: | | Company: | | Received by | | Date/Time: | | Company: |
| Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No | | Custody Seal No | | Cooler Temperature(s) °C and Other Remarks | | 1.7 - 2/15, 1.9 - 2/12 | | | | |



Chain of Custody Record



Environment Testing



| | | | | | |
|---|----------------------------------|---|--|-------------------------------------|--------------|
| Client Information (Sub Contract Lab) | | Sampler: | Lab PM: | Camer Tracking No(s): | |
| Client Contact: Shipping/Receiving | | Mockler, Diana J | Mockler, Diana J | 500-171394.1 | |
| Company: TestAmerica Laboratories, Inc. | | E-Mail: Diana.Mockler@et.eurofins.com | State of Origin: Illinois | Page: 1 of 1 | |
| Address: 13715 Rider Trail North, | | Accreditations Required (See note): NELAP - Illinois | | Job #: 500-230034-2 | |
| City: Earth City | Due Date Requested: 3/30/2023 | Analysis Requested | | | |
| State, Zip: MO, 63045 | TAT Requested (days): | | | | |
| Phone: 314-298-8566(Tel) 314-298-8757(Fax) | PO #: | Perform MS/MSD (Yes or No) | 903.0/PreSep_21 Standard Target List | 904.0/PreSep_0 Standard Target List | R226R228_GPC |
| Email: | WO #: | Field Filtered Sample (Yes or No) | X | X | |
| Project Name: Joliet #29 CCR (RAD) | Project #: 50011568 | Sample Type (C=comp, G=grab) | Water | X | |
| Site: NRG Midwest Generation LSQ Joliet#29 CCR | SSOW#: | Sample Time | 09:26 Central | X | |
| Sample Identification - Client ID (Lab ID) | | Sample Date | 2/28/23 | X | |
| | | Matrix (Water, Solid, Other, etc.) | Water | X | |
| | | Sample Time | 10:32 Central | X | |
| | | Sample Time | 11:31 Central | X | |
| | | Sample Time | 15:35 Central | X | |
| MW-03 (500-230034-1) | | Sample Date | 2/28/23 | X | |
| MW-04 (500-230034-2) | | Sample Date | 2/28/23 | X | |
| MW-05 (500-230034-3) | | Sample Date | 2/28/23 | X | |
| MW-10 (500-230034-4) | | Sample Date | 2/28/23 | X | |
| Duplicate (500-230034-5) | | Sample Date | 2/28/23 | X | |
| Total Number of Containers | | Special Instructions/Note: | Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume; Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume; Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume; Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume; Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume; Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume; | | |
| | | Other: | M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify) | | |

Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Chicago attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago.

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2
 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:

Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: *Ann Smith* Date/Time: 3/1/23 15:15
 Relinquished by: *Fedex* Date/Time: 3/1/23 09:50
 Relinquished by: _____ Date/Time: _____
 Custody Seals Intact: Yes No
 Cooler Temperature(s) °C and Other Remarks:



Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-230034-2

Login Number: 230034

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 | 1.5,1.7 |
| 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 <math><6\text{mm}</math> (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |



Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-230034-2

Login Number: 230034

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 03/02/23 04:08 PM

| Question | Answer | Comment |
|--|--------|---------|
| Radioactivity wasn't checked or is </= 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? | 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 <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |



Lab Chronicle

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

Job ID: 500-230034-2

Client Sample ID: MW-03

Date Collected: 02/28/23 09:26

Date Received: 03/01/23 09:23

Lab Sample ID: 500-230034-1

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Prep | PrecSep-21 | | | 602324 | DJP | EET SL | 03/03/23 11:25 |
| Total/NA | Analysis | 903.0 | | 1 | 605094 | FLC | EET SL | 03/27/23 21:12 |
| Total/NA | Prep | PrecSep_0 | | | 602331 | DJP | EET SL | 03/03/23 12:12 |
| Total/NA | Analysis | 904.0 | | 1 | 603705 | FLC | EET SL | 03/15/23 11:49 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605403 | MLK | EET SL | 03/29/23 19:31 |

Client Sample ID: MW-04

Date Collected: 02/28/23 10:32

Date Received: 03/01/23 09:23

Lab Sample ID: 500-230034-2

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Prep | PrecSep-21 | | | 602324 | DJP | EET SL | 03/03/23 11:25 |
| Total/NA | Analysis | 903.0 | | 1 | 605094 | FLC | EET SL | 03/27/23 21:12 |
| Total/NA | Prep | PrecSep_0 | | | 602331 | DJP | EET SL | 03/03/23 12:12 |
| Total/NA | Analysis | 904.0 | | 1 | 603705 | FLC | EET SL | 03/15/23 11:49 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605403 | MLK | EET SL | 03/29/23 19:31 |

Client Sample ID: MW-05

Date Collected: 02/28/23 11:31

Date Received: 03/01/23 09:23

Lab Sample ID: 500-230034-3

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Prep | PrecSep-21 | | | 602324 | DJP | EET SL | 03/03/23 11:25 |
| Total/NA | Analysis | 903.0 | | 1 | 605277 | FLC | EET SL | 03/28/23 13:14 |
| Total/NA | Prep | PrecSep_0 | | | 602331 | DJP | EET SL | 03/03/23 12:12 |
| Total/NA | Analysis | 904.0 | | 1 | 603703 | FLC | EET SL | 03/15/23 11:51 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605403 | MLK | EET SL | 03/29/23 19:31 |

Client Sample ID: MW-10

Date Collected: 02/28/23 15:35

Date Received: 03/01/23 09:23

Lab Sample ID: 500-230034-4

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Prep | PrecSep-21 | | | 602324 | DJP | EET SL | 03/03/23 11:25 |
| Total/NA | Analysis | 903.0 | | 1 | 605094 | FLC | EET SL | 03/27/23 21:12 |
| Total/NA | Prep | PrecSep_0 | | | 602331 | DJP | EET SL | 03/03/23 12:12 |
| Total/NA | Analysis | 904.0 | | 1 | 603703 | FLC | EET SL | 03/15/23 11:52 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605403 | MLK | EET SL | 03/29/23 19:31 |

Lab Chronicle

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

Job ID: 500-230034-2

Client Sample ID: Duplicate

Lab Sample ID: 500-230034-5

Date Collected: 02/28/23 00:00

Matrix: Water

Date Received: 03/01/23 09:23

| <u>Prep Type</u> | <u>Batch Type</u> | <u>Batch Method</u> | <u>Run</u> | <u>Dilution Factor</u> | <u>Batch Number</u> | <u>Analyst</u> | <u>Lab</u> | <u>Prepared or Analyzed</u> |
|------------------|-------------------|---------------------|------------|------------------------|---------------------|----------------|------------|-----------------------------|
| Total/NA | Prep | PrecSep-21 | | | 602324 | DJP | EET SL | 03/03/23 11:25 |
| Total/NA | Analysis | 903.0 | | 1 | 605094 | FLC | EET SL | 03/27/23 21:12 |
| Total/NA | Prep | PrecSep_0 | | | 602331 | DJP | EET SL | 03/03/23 12:12 |
| Total/NA | Analysis | 904.0 | | 1 | 603703 | FLC | EET SL | 03/15/23 11:52 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605403 | MLK | EET SL | 03/29/23 19:31 |

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: 500-230034-2

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) |
|--------------------|--------------------|----------------|
| 500-230034-1 | MW-03 | 82.8 |
| 500-230034-1 DU | MW-03 | 71.2 |
| 500-230034-2 | MW-04 | 78.8 |
| 500-230034-3 | MW-05 | 72.6 |
| 500-230034-4 | MW-10 | 69.2 |
| 500-230034-5 | Duplicate | 72.6 |
| LCS 160-602324/2-A | Lab Control Sample | 81.9 |
| MB 160-602324/1-A | Method Blank | 91.0 |

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) |
|--------------------|--------------------|----------------|---------------|
| 500-230034-1 | MW-03 | 82.8 | 82.2 |
| 500-230034-1 DU | MW-03 | 71.2 | 80.7 |
| 500-230034-2 | MW-04 | 78.8 | 80.4 |
| 500-230034-3 | MW-05 | 72.6 | 80.0 |
| 500-230034-4 | MW-10 | 69.2 | 84.5 |
| 500-230034-5 | Duplicate | 72.6 | 83.4 |
| LCS 160-602331/2-A | Lab Control Sample | 81.9 | 86.0 |
| MB 160-602331/1-A | Method Blank | 91.0 | 83.0 |

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: John Niedzwiecki
Midwest Generation EME LLC
1800 Channahon Road
Joliet, Illinois 60436

Generated 3/30/2023 11:31:25 AM

JOB DESCRIPTION

Joliet #29 CCR MW-05 Resample (B, Ca, SO4)

JOB NUMBER

500-231163-1

Eurofins Chicago

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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
3/30/2023 11:31:25 AM

Authorized for release by
Diana Mockler, Project Manager I
Diana.Mockler@et.eurofinsus.com
(219)252-7570



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Case Narrative

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR MW-05 Resample (B, Ca, SO4)

Job ID: 500-231163-1

Job ID: 500-231163-1

Laboratory: Eurofins Chicago

Narrative

**Job Narrative
500-231163-1**

Receipt

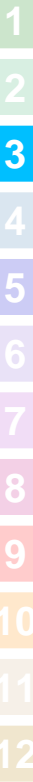
The sample was received on 3/23/2023 2:40 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 8.1° C.

Metals

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

General Chemistry

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



Method Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR MW-05 Resample (B, Ca, SO4)

Job ID: 500-231163-1

| Method | Method Description | Protocol | Laboratory |
|---------------|--|----------|------------|
| 6020A | Metals (ICP/MS) | SW846 | EET CHI |
| SM 4500 SO4 E | Sulfate, Total | SM | EET CHI |
| 3005A | Preparation, Total Recoverable or Dissolved Metals | 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

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Sample Summary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR MW-05 Resample (B, Ca, SO4)

Job ID: 500-231163-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|------------------|--------|----------------|----------------|
| 500-231163-1 | MW-05 CCR | Water | 03/23/23 12:58 | 03/23/23 14:40 |

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Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR MW-05 Resample (B, Ca, SO4)

Job ID: 500-231163-1

Client Sample ID: MW-05 CCR

Lab Sample ID: 500-231163-1

Date Collected: 03/23/23 12:58

Matrix: Water

Date Received: 03/23/23 14:40

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|-------|-----|------|---|----------------|----------------|---------|
| Boron | 0.46 | | 0.050 | | mg/L | | 03/27/23 09:17 | 03/28/23 21:18 | 1 |
| Calcium | 130 | | 0.20 | | mg/L | | 03/27/23 09:17 | 03/28/23 21:18 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------|--------|-----------|----|-----|------|---|----------|----------------|---------|
| Sulfate (SM 4500 SO4 E) | 170 | | 50 | | mg/L | | | 03/24/23 12:29 | 10 |

Definitions/Glossary

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR MW-05 Resample (B, Ca, SO4)

Job ID: 500-231163-1

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|---|
| α | 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 MW-05 Resample (B, Ca, SO4)

Job ID: 500-231163-1

Metals

Prep Batch: 704325

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-------------------|--------|--------|------------|
| 500-231163-1 | MW-05 CCR | Total Recoverable | Water | 3005A | |
| MB 500-704325/1-A | Method Blank | Total Recoverable | Water | 3005A | |
| LCS 500-704325/2-A | Lab Control Sample | Total Recoverable | Water | 3005A | |

Analysis Batch: 704829

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-------------------|--------|--------|------------|
| 500-231163-1 | MW-05 CCR | Total Recoverable | Water | 6020A | 704325 |
| MB 500-704325/1-A | Method Blank | Total Recoverable | Water | 6020A | 704325 |
| LCS 500-704325/2-A | Lab Control Sample | Total Recoverable | Water | 6020A | 704325 |

General Chemistry

Analysis Batch: 704148

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|---------------|------------|
| 500-231163-1 | MW-05 CCR | Total/NA | Water | SM 4500 SO4 E | |
| MB 500-704148/16 | Method Blank | Total/NA | Water | SM 4500 SO4 E | |
| LCS 500-704148/17 | Lab Control Sample | Total/NA | Water | SM 4500 SO4 E | |

QC Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Joliet #29 CCR MW-05 Resample (B, Ca, SO4)

Job ID: 500-231163-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-704325/1-A
Matrix: Water
Analysis Batch: 704829

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 704325

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|-------|-----|------|---|----------------|----------------|---------|
| Boron | <0.050 | | 0.050 | | mg/L | | 03/27/23 09:17 | 03/28/23 19:38 | 1 |
| Calcium | <0.20 | | 0.20 | | mg/L | | 03/27/23 09:17 | 03/28/23 19:38 | 1 |

Lab Sample ID: LCS 500-704325/2-A
Matrix: Water
Analysis Batch: 704829

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 704325

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Boron | 1.00 | 0.971 | | mg/L | | 97 | 80 - 120 |
| Calcium | 10.0 | 10.3 | | mg/L | | 103 | 80 - 120 |

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-704148/16
Matrix: Water
Analysis Batch: 704148

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 | | | 03/24/23 12:03 | 1 |

Lab Sample ID: LCS 500-704148/17
Matrix: Water
Analysis Batch: 704148

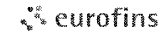
Client Sample ID: Lab Control Sample
Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Sulfate | 20.0 | 20.2 | | mg/L | | 101 | 88 - 123 |

Eurofins Chicago

2417 Bond Street
 University Park IL 60484
 Phone 708-534 5200 Fax 708-534-5211

Chain of Custody Record



| | | | | | | | | | |
|--|--|--|--------------|--|--|--------------------------------------|--|---|--|
| Client Information | | Sampler <i>IAN JOHN HAWLESON</i> | | Lab PM Mockler Diana J | | Carrier Tracking No(s) | | COC No 500-110230-45941 1 | |
| Client Contact Patrick Allenstein | | Phone <i>630-290-6850</i> | | E-Mail Diana.Mockler@et.eurofins.com | | State of Origin | | Page Page 1 of 1 | |
| Company KPRG and Associates Inc. | | | | PWS# | | Analysis Requested | | | |
| Address 14665 West Lisbon Road Suite 1A City: Brookfield State Zip WI 53005 Phone: 500 231163 COC | | Due Date Requested | | Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 40406-0020A-7770A BACA ONLY 2540C 4500_F_C_SM4500_CL_E_SM4500_SO4_E_SULPHATE 903.0, 904.0 | | Total Number of Containers | | Job # <i>500-231163</i> | |
| City: Brookfield | | TAT Requested (days) | | | | | | Preservation Codes | |
| State Zip WI 53005 | | Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No | | | | | | A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid Q Na2SO3 E NaHSO4 R Na2S2O3 F MeOH S H2SO4 G Amchlor T TSP Dodecahydrate H Ascorbic Acid Acetone I Ice V MCAA J DI Water W pH 4-6 K EDTA Y Trizma L EDA Z other (specify) | |
| Email patricka@kprginc.com | | PO #: 4502085968 | | WO # | | Other: | | | |
| Project Name: Joliet #29 CCR/ Event Desc Quarterly MWG Joliet #29 CCR | | Project #: 50011568 | | SSOW# | | Site Illinois | | | |
| Sample Identification | | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=tissue, A=air) | Field Filtered Sample (Yes or No) | | Special Instructions/Note | |
| | | | | | | D N D | | | |
| MW-03- | | | | | Water | | | | |
| MW-04 | | | | | Water | | | | |
| MW-05 <i>CCR</i> | | <i>3-23-23</i> | <i>12:58</i> | <i>G</i> | Water | <i>N N X X</i> | | <i>Z Boron, Calcium & Sulphate only</i> | |
| MW-10- | | | | | Water | | | | |
| Duplicate | | | | | Water | | | | |
| | | | | | Water | | | | |
| Possible Hazard Identification | | | | | Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) | | | | |
| <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological | | | | | <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months | | | | |
| Deliverable Requested I II III IV Other (specify) | | | | | Special Instructions/QC Requirements | | | | |
| Empty Kit Relinquished by | | Date | | Time | | Method of Shipment | | | |
| <i>[Signature]</i> | | <i>2-23-23 14:40</i> | | <i>KPRG</i> | | <i>[Signature] 3/23/23 1440 BETA</i> | | | |
| Reinquired by | | Date/Time | | Company | | Received by | | Date/Time | |
| <i>[Signature]</i> | | | | | | <i>[Signature]</i> | | | |
| Reinquired by | | Date/Time | | Company | | Received by | | Date/Time | |
| | | | | | | | | | |
| Reinquired by | | Date/Time | | Company | | Received by | | Date/Time | |
| | | | | | | | | | |
| Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No | | Custody Seal No | | Cooler Temperatures °C and Other Remarks | | <i>8.2 -> 8.1</i> | | | |



Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-231163-1

Login Number: 231163

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 | Received same day of collection; chilling process has begun. |
| Cooler Temperature is recorded. | True | 8.1 |
| 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 <math><6\text{mm}</math> (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Joliet #29 CCR MW-05 Resample (B, Ca, SO4)

Job ID: 500-231163-1

Client Sample ID: MW-05 CCR

Lab Sample ID: 500-231163-1

Date Collected: 03/23/23 12:58

Matrix: Water

Date Received: 03/23/23 14:40

| <u>Prep Type</u> | <u>Batch Type</u> | <u>Batch Method</u> | <u>Run</u> | <u>Dilution Factor</u> | <u>Batch Number</u> | <u>Analyst</u> | <u>Lab</u> | <u>Prepared or Analyzed</u> |
|-------------------|-------------------|---------------------|------------|------------------------|---------------------|----------------|------------|--|
| Total Recoverable | Prep | 3005A | | | 704325 | BDE | EET CHI | 03/27/23 09:17 - 03/27/23 09:47 ¹ |
| Total Recoverable | Analysis | 6020A | | 1 | 704829 | FXG | EET CHI | 03/28/23 21:18 |
| Total/NA | Analysis | SM 4500 SO4 E | | 10 | 704148 | LP | EET CHI | 03/24/23 12:29 |

¹ Completion dates and times are reported or not reported per method requirements or individual lab discretion.

Laboratory References:

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

| | | | | |
|---------------------|------------------------------------|------------------------|---------------|---------|
| PROJECT NAME | NRG - JOLIET #29 STATION (12313.0) | | DATE | 2-28-23 |
| Sample Name | MW-03 | Start Time | 09:05 | |
| Condition of Well | Good | | | |
| Water Level | 32.06 | Total Depth | — | |
| Well Diameter | PVC - 2 inch | Volume in Well | — | |
| Method of Purge | Low-Flow | Purge Characteristics | APPEARS CLEAR | |
| Volume Removed | 3.5 QTB. | W L at Sample Time | 32.05 | |
| Method of Sample | Low-Flow | Sample Characteristics | APPEARS CLEAR | |
| Sample Analysis | CCA + CCR + CCR Dups | Sample Time | 09:26 | |
| Water Quality Meter | YSI ProDss | | | |

| Time | Depth to Water (ft) | ph (SU) | Temp (°C) | Spec. Cond (mS/cm). | DO (mg/L) | ORP (mV) | Turbidity (NTU) |
|-------|---------------------|---------|-----------|---------------------|-----------|----------|-----------------|
| 09:08 | 32.05 | 7.38 | 8.3 | 1748 | 9.91 | 77.0 | 3.37 |
| 09:11 | 32.05 | 7.33 | 9.2 | 1828 | 8.79 | 69.5 | 7.46 |
| 09:14 | 32.04 | 7.08 | 10.6 | 1817 | 6.06 | 63.9 | 17.18 |
| 09:17 | 32.05 | 7.06 | 10.9 | 1815 | 5.47 | 57.4 | 11.37. |
| 09:20 | 32.05 | 7.05 | 11.1 | 1810 | 4.99 | 52.1 | 10.09 |
| 09:23 | 32.05 | 7.06 | 11.5 | 1813 | 4.81 | 46.7 | 7.52. |
| 09:26 | 32.05 | 7.06 | 11.5 | 1814 | 4.77 | 44.7 | 6.98 |
| | | | | | | | |
| | | | | | | | |

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

IAN JOHN HOWIESON 


| | | | | |
|---------------------|------------------------------------|------------------------|---------------------------------|---------|
| PROJECT NAME | NRG - JOLIET #29 STATION (12313.0) | | DATE | 2-28-23 |
| Sample Name | MW-04 | Start Time | 10:17 | |
| Condition of Well | GOOD | | | |
| Water Level | 32.33 | Total Depth | — | |
| Well Diameter | PVC - 2 inch | Volume in Well | — | |
| Method of Purge | Low-Flow | Purge Characteristics | SLIGHT GREYISH TINT → CLEAR | |
| Volume Removed | 2.5 QTS | WL at Sample Time | 32.31 | |
| Method of Sample | Low-Flow | Sample Characteristics | APPEARS CLEAR WHEN FILTERED. | |
| Sample Analysis | CCA + CCR | Sample Time | 10:32 | |
| Water Quality Meter | YSI ProDss | | | |

| Time | Depth to Water (ft) | ph (SU) | Temp (°C) | Spec. Cond (mS/cm) | DO (mg/L) | ORP (mV) | Turbidity (NTU) |
|-------|---------------------|---------|-----------|--------------------|-----------|----------|-----------------|
| 10:20 | 32.32 | 7.63 | 9.8 | 1701 | 9.41 | 42.9 | 8.52 |
| 10:23 | 32.31 | 7.27 | 11.2 | 1747 | 6.95 | 42.6 | 32.90 |
| 10:26 | 32.31 | 7.19 | 11.3 | 1774 | 5.94 | 38.6 | 50.23 |
| 10:29 | 32.31 | 7.17 | 11.4 | 1782 | 5.20 | 35.2 | 60.53 |
| 10:32 | 32.31 | 7.16 | 11.4 | 1785 | 5.14 | 33.8 | 62.1 |
| | | | | | | | |
| | | | | | | | |
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SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

IAN JOHN HANLSON 

| | | | | |
|---------------------|------------------------------------|------------------------|---------------------------------|---------|
| PROJECT NAME | NRG - JOLIET #29 STATION (12313.0) | | DATE | 2-28-23 |
| Sample Name | MW-05 | Start Time | 11:19 | |
| Condition of Well | GOOD | | | |
| Water Level | 33.01 | Total Depth | — | |
| Well Diameter | PVC - 2 inch | Volume in Well | — | |
| Method of Purge | Low-Flow | Purge Characteristics | TRACE TURB COLORLESS | |
| Volume Removed | 2 QTS | W L at Sample Time | 33.01 | |
| Method of Sample | Low-Flow | Sample Characteristics | APPEARS CLEAR WHEN FILTERED. | |
| Sample Analysis | ECA + CCR | Sample Time | 11:31 | |
| Water Quality Meter | YSI ProDss | | | |

| Time | Depth to Water (ft) | ph (SU) | Temp (°C) | Spec. Cond (mS/cm) | DO (mg/L) | ORP (mV) | Turbidity (NTU) |
|-------|---------------------|---------|-----------|--------------------|-----------|----------|-----------------|
| 11:22 | 33.01 | 7.38 | 12.5 | 1580 | 6.96 | 37.5 | 30.49 |
| 11:25 | 33.0 | 7.19 | 12.7 | 1548 | 6.42 | 33.8 | 55.80 |
| 11:28 | 33.01 | 7.16 | 12.4 | 1542 | 6.35 | 31.6 | 58.75 |
| 11:31 | 33.01 | 7.15 | 12.5 | 1531 | 6.35 | 31.6 | 58.32 |
| | | | | | | | |
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SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

IAN JOHN HAWKSON



| | | | | |
|---------------------|------------------------------------|------------------------|---------------|---------|
| PROJECT NAME | NRG - JOLIET #29 STATION (12313.0) | | DATE | 2-28-23 |
| Sample Name | MW-10 | Start Time | 15:20 | |
| Condition of Well | GOOD | | | |
| Water Level | 33.22 | Total Depth | — | |
| Well Diameter | PVC - 2 inch | Volume in Well | — | |
| Method of Purge | Low-Flow | Purge Characteristics | APPEARS CLEAR | |
| Volume Removed | 2.5 QRS | W L at Sample Time | 33.21 | |
| Method of Sample | Low-Flow | Sample Characteristics | APPEARS CLEAR | |
| Sample Analysis | CCA + CCR | Sample Time | 15:35 | |
| Water Quality Meter | YSI ProDss | | | |

| Time | Depth to Water (ft) | ph (SU) | Temp (°C) | Spec. Cond (mS/cm) | DO (mg/L) | ORP (mV) | Turbidity (NTU) |
|-------|---------------------|---------|-----------|--------------------|-----------|----------|-----------------|
| 15:23 | 33.22 | 7.20 | 11.5 | 1735 | 8.15 | 59.1 | 10.77 |
| 15:26 | 33.21 | 7.09 | 11.9 | 1869 | 6.77 | 60.0 | 17.97 |
| 15:29 | 33.21 | 7.07 | 11.9 | 1916 | 6.25 | 58.6 | 20.30 |
| 15:32 | 33.21 | 7.06 | 12.0 | 1939 | 6.01 | 57.4 | 18.85 |
| 15:35 | 33.21 | 7.06 | 11.9 | 1945 | 5.93 | 56.7 | 17.13 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
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SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

IAN JOHN HOWLSON 