

## **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 3<sup>rd</sup> quarter 2024 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 1. Groundwater Analytical Results - Midwest Generation, LLC, Joliet Station #29, Joliet, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228	Selenium	Thallium	
MW-05 down- gradient	10/28/2015	0.64	100	160	0.39	7.12	120	790	< 0.003	0.0011	0.057	^< 0.001	< 0.0005	< 0.005	0.0013	< 0.0005	0.018	< 0.0002	0.0088	0.6231	0.0031	< 0.002	
	2/10/2016	0.46	110	220	0.39	7.25	120	790	< 0.003	0.0028	0.071	< 0.001	< 0.0005	0.0062	0.0013	< 0.002	< 0.002	< 0.0002	FI 0.0053	1.09	< 0.0025	< 0.002	
	5/10/2016	0.8	150	220	0.46	6.88	290	950	< 0.003	0.0023	0.075	< 0.001	< 0.0005	< 0.005	< 0.001	0.0022	0.014	< 0.0002	0.008	< 0.40	0.019	< 0.002	
	8/31/2016	1.0	140	99	0.56	6.81	260	820	< 0.003	< 0.001	0.07	^< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.012	< 0.42	0.02	< 0.002	
	11/2/2016	0.41	98	130	0.37	7.26	100	700	< 0.003	0.0022	0.056	< 0.001	< 0.0005	0.0051	< 0.001	0.0017	0.015	< 0.0002	0.0061	0.438	< 0.0025	< 0.002	
	2/6/2017	0.48	150	180	0.30	7.22	120	790	< 0.003	0.0016	0.082	< 0.001	< 0.0005	< 0.005	< 0.001	0.0016	0.021	< 0.0002	< 0.005	0.564	0.0029	< 0.002	
	4/26/2017	0.67	110	FI 190	0.37	7.28	170	770	< 0.003	0.0014	0.063	< 0.001	< 0.0005	< 0.005	< 0.001	0.0008	< 0.001	< 0.0002	0.0066	< 0.411	0.013	< 0.002	
	6/14/2017	0.44	75	150	0.46	7.47	110	670	< 0.003	0.0012	0.044	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.013	< 0.0002	0.0076	< 0.316	0.0029	< 0.002	
	8/2/2017	0.28	83	170	0.35	7.30	99	770	< 0.003	< 0.001	0.054	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.014	< 0.0002	0.0053	0.659	< 0.0025	< 0.002	
	10/18/2017	0.42	110	110	0.38	7.16	95	720	< 0.003	0.002	0.067	^< 0.001	< 0.0005	< 0.005	< 0.001	0.0023	0.018	< 0.0002	< 0.005	< 0.371	0.0029	^< 0.002	
	4/24/2018	0.31	110	300	0.34	7.33	130	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/31/2018 R	NA	NA	NA	NA	NA	NA	940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/17/2018	0.31	110	210	0.36	7.29	93	810	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/6/2019	0.38	130	500	0.31	7.11	84	1300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/3/2019 R	NA	NA	150	NA	NA	NA	890	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/7/2019	0.31	180	130	0.3	7.44	64	590	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/4/2019 R	NA	89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/20/2020	0.32	100	270	0.37	7.03	67	890	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/22/2020	0.52	92	180	0.38	7.16	85	720	< 0.003	0.0012	0.069	^< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.013	< 0.0002	0.0054	NA	0.003	< 0.002	
	5/18/2021	0.37	130	410	0.3	7.00	160	1300	< 0.003	0.0015	0.1	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.023	< 0.0002	< 0.005	< 0.5970	< 0.0025	< 0.002	
	6/29/2021 R	NA	NA	430	NA	7.33	150	1300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/27/2021	0.36	100	300	0.3	6.94	140	960	^< 0.003	0.0014	0.069	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.015	< 0.0002	< 0.005	0.528	0.0027	< 0.002	
	11/16/2021	0.44	120	260	0.3	7.08	140	970	< 0.003	0.0016	0.079	^1+< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.014	< 0.0002	0.0069	0.738	< 0.0025	< 0.002	
	3/3/2022	0.43	110	230	0.3	7.04	140	900	< 0.003	0.0015	0.074	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.017	< 0.0002	< 0.005	0.514	< 0.0025	< 0.002	
	5/26/2022	0.55	120	320	0.31	6.86	140	1100	< 0.003	0.003	0.082	^< 0.001	< 0.0005	< 0.005	< 0.001	0.0018	0.015	< 0.0002	< 0.005	< 0.656	0.0029	< 0.002	
	8/31/2022	0.43	110	240	0.32	6.5	130	1100	< 0.003	0.0015	0.066	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.016	< 0.0002	< 0.005	< 0.421	< 0.0025	< 0.002	
	11/9/2022	0.39	120	230	0.42	7	120	910	< 0.003	0.0021	0.068	< 0.001	< 0.0005	< 0.005	< 0.001	0.00093	0.015	< 0.0002	< 0.005	< 0.501	< 0.0025	< 0.002	
	2/28/2023	0.60	160	130	0.35	7.15	260	980	< 0.0030	0.0019	0.080	< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.00084	0.013	< 0.00020	0.011	< 0.685	0.022	< 0.0020	
	3/23/2023 R	0.46	130	NA	NA	NA	170	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/3/2023	0.50	110	270	0.30	6.96	120	910	< 0.0030	< 0.0010	0.072	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.016	< 0.00020	< 0.0050	< 0.604	0.0027	< 0.0020	
	7/20/2023	0.45	110	240	0.30	6.94	120	900	< 0.0030	0.0011	0.070	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.016	< 0.00020	< 0.0050	< 0.607	< 0.0025	< 0.0020	
	10/26/2023	0.42	110	220	0.32	6.96	150	910	< 0.0030	0.0012	0.073	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.015	< 0.00020	0.0050	1.16	0.0025	< 0.0020	
	1/23/2024	0.49	110	210	0.29	6.93	210	1000	^1+< 0.0030	0.0012	0.098	^1+< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.016	< 0.00020	0.0050	0.779	< 0.0025	< 0.0020	
	5/22/2024	0.58	110	260	0.34	7.07	180	1100	< 0.0030	< 0.0010	0.072	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.015	< 0.00020	< 0.0050	0.834	< 0.0025	< 0.0020	
7/30/2024	0.52	100	150	0.31	7.45	140	750	< 0.0030	< 0.0010	0.068	< 0.0010	< 0.00050	< 0.0050	< 0.0010	^1+< 0.00050	0.014	< 0.00020	0.0051	< 0.488	0.0025	< 0.0020		

Notes: All units are in mg/l except pH is in standard units and radium is in pCiL.  
 DNYA - Data not yet available.  
 FI - MS and/or MSD Recovery outside of limits.  
 NA - Not analyzed. No confirmation resample required.  
 ^< - Continuing calibration verification is outside acceptance limits, high biased.  
 R - Resampled under federal rule.

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
	5/3/2023	3.00
7/20/2023	5.90	
10/26/2023	3.50	
1/23/2024	90.70	
5/22/2024	48.07	
7/30/2024	8.94	
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
	5/3/2023	6.30
7/20/2023	6.00	
10/26/2023	1.60	
1/23/2024	80.10	
5/22/2024	24.27	
7/30/2024	5.04	
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
	5/3/2023	2.50
7/20/2023	6.00	
10/26/2023	1.10	
1/23/2024	7.12	
5/22/2024	3.23	
7/30/2024	2.46	

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

Well ID	Date	Turbidity (NTU)
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
	5/3/2023	2.6
	7/20/2023	5.6
	10/26/2023	1.4
	1/23/2024	82.7
5/22/2024	49.31	
7/30/2024	2.27	

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

Attn: James Thorne  
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1800 Channahon Road  
Joliet, Illinois 60436

Generated 8/21/2024 2:03:41 PM

**JOB DESCRIPTION**

Joliet #29 CCR

**JOB NUMBER**

500-254274-1

# Eurofins Chicago

## Job Notes

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## Authorization



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# Case Narrative

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

Job ID: 500-254274-1

**Job ID: 500-254274-1**

**Eurofins Chicago**

**Job Narrative  
500-254274-1**

## Receipt

The samples were received on 7/31/2024 8:55 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 4.3°C and 4.8°C.

## Metals

Method 6020B - Total Recoverable: The initial low level calibration verification (ICVL) result for batch 500-782080 was above the upper control limit. The affected analytes are: Lead. Sample results were below the reporting limit, and have been reported as qualified data.

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

## General Chemistry

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

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# Method Summary

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

Job ID: 500-254274-1

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

#### Protocol References:

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

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

#### Laboratory References:

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

# Sample Summary

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

Job ID: 500-254274-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-254274-1	MW-03	Water	07/30/24 10:25	07/31/24 08:55
500-254274-2	MW-04	Water	07/30/24 09:14	07/31/24 08:55
500-254274-3	MW-05	Water	07/30/24 11:50	07/31/24 08:55
500-254274-4	MW-10	Water	07/30/24 13:46	07/31/24 08:55
500-254274-5	Duplicate	Water	07/30/24 00:00	07/31/24 08:55

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# Client Sample Results

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

Job ID: 500-254274-1

**Client Sample ID: MW-03**  
**Date Collected: 07/30/24 10:25**  
**Date Received: 07/31/24 08:55**

**Lab Sample ID: 500-254274-1**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/14/24 15:40	08/16/24 20:47	1
<b>Arsenic</b>	<b>0.0013</b>		0.0010		mg/L		08/14/24 15:40	08/16/24 20:47	1
<b>Barium</b>	<b>0.099</b>		0.0025		mg/L		08/14/24 15:40	08/16/24 20:47	1
Beryllium	<0.0010		0.0010		mg/L		08/14/24 15:40	08/16/24 20:47	1
<b>Boron</b>	<b>0.44</b>		0.050		mg/L		08/14/24 15:40	08/16/24 20:47	1
Cadmium	<0.00050		0.00050		mg/L		08/14/24 15:40	08/16/24 20:47	1
<b>Calcium</b>	<b>100</b>		0.20		mg/L		08/14/24 15:40	08/16/24 20:47	1
Chromium	<0.0050		0.0050		mg/L		08/14/24 15:40	08/16/24 20:47	1
Cobalt	<0.0010		0.0010		mg/L		08/14/24 15:40	08/16/24 20:47	1
Lead	<0.00050	^1+	0.00050		mg/L		08/14/24 15:40	08/16/24 20:47	1
<b>Lithium</b>	<b>0.011</b>		0.010		mg/L		08/14/24 15:40	08/16/24 20:47	1
<b>Molybdenum</b>	<b>0.0052</b>		0.0050		mg/L		08/14/24 15:40	08/16/24 20:47	1
<b>Selenium</b>	<b>0.0037</b>		0.0025		mg/L		08/14/24 15:40	08/16/24 20:47	1
Thallium	<0.0020		0.0020		mg/L		08/14/24 15:40	08/16/24 20:47	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/20/24 10:35	08/21/24 05:28	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>820</b>		10		mg/L			08/04/24 23:17	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>170</b>		10		mg/L			08/04/24 13:24	5
<b>Fluoride (SM 4500 F C)</b>	<b>0.41</b>		0.10		mg/L			08/15/24 13:02	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>130</b>		25		mg/L			08/05/24 16:18	5

# Client Sample Results

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

Job ID: 500-254274-1

**Client Sample ID: MW-04**  
**Date Collected: 07/30/24 09:14**  
**Date Received: 07/31/24 08:55**

**Lab Sample ID: 500-254274-2**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/14/24 15:40	08/16/24 20:49	1
<b>Arsenic</b>	<b>0.0013</b>		0.0010		mg/L		08/14/24 15:40	08/16/24 20:49	1
<b>Barium</b>	<b>0.074</b>		0.0025		mg/L		08/14/24 15:40	08/16/24 20:49	1
Beryllium	<0.0010		0.0010		mg/L		08/14/24 15:40	08/16/24 20:49	1
<b>Boron</b>	<b>0.34</b>		0.050		mg/L		08/14/24 15:40	08/16/24 20:49	1
Cadmium	<0.00050		0.00050		mg/L		08/14/24 15:40	08/16/24 20:49	1
<b>Calcium</b>	<b>110</b>		0.20		mg/L		08/14/24 15:40	08/16/24 20:49	1
Chromium	<0.0050		0.0050		mg/L		08/14/24 15:40	08/16/24 20:49	1
<b>Cobalt</b>	<b>0.0081</b>		0.0010		mg/L		08/14/24 15:40	08/16/24 20:49	1
Lead	<0.00050	^1+	0.00050		mg/L		08/14/24 15:40	08/16/24 20:49	1
<b>Lithium</b>	<b>0.013</b>		0.010		mg/L		08/14/24 15:40	08/16/24 20:49	1
<b>Molybdenum</b>	<b>0.0057</b>		0.0050		mg/L		08/14/24 15:40	08/16/24 20:49	1
Selenium	<0.0025		0.0025		mg/L		08/14/24 15:40	08/16/24 20:49	1
Thallium	<0.0020		0.0020		mg/L		08/14/24 15:40	08/16/24 20:49	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/20/24 10:35	08/21/24 05:30	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>860</b>		10		mg/L			08/04/24 23:20	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>170</b>		10		mg/L			08/04/24 13:24	5
<b>Fluoride (SM 4500 F C)</b>	<b>0.42</b>		0.10		mg/L			08/15/24 13:06	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>120</b>		25		mg/L			08/05/24 16:18	5

# Client Sample Results

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

Job ID: 500-254274-1

**Client Sample ID: MW-05**  
**Date Collected: 07/30/24 11:50**  
**Date Received: 07/31/24 08:55**

**Lab Sample ID: 500-254274-3**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/14/24 15:40	08/16/24 20:51	1
Arsenic	<0.0010		0.0010		mg/L		08/14/24 15:40	08/16/24 20:51	1
<b>Barium</b>	<b>0.068</b>		0.0025		mg/L		08/14/24 15:40	08/16/24 20:51	1
Beryllium	<0.0010		0.0010		mg/L		08/14/24 15:40	08/16/24 20:51	1
<b>Boron</b>	<b>0.52</b>		0.050		mg/L		08/14/24 15:40	08/16/24 20:51	1
Cadmium	<0.00050		0.00050		mg/L		08/14/24 15:40	08/16/24 20:51	1
<b>Calcium</b>	<b>100</b>		0.20		mg/L		08/14/24 15:40	08/16/24 20:51	1
Chromium	<0.0050		0.0050		mg/L		08/14/24 15:40	08/16/24 20:51	1
Cobalt	<0.0010		0.0010		mg/L		08/14/24 15:40	08/16/24 20:51	1
Lead	<0.00050	^1+	0.00050		mg/L		08/14/24 15:40	08/16/24 20:51	1
<b>Lithium</b>	<b>0.014</b>		0.010		mg/L		08/14/24 15:40	08/16/24 20:51	1
<b>Molybdenum</b>	<b>0.0051</b>		0.0050		mg/L		08/14/24 15:40	08/16/24 20:51	1
<b>Selenium</b>	<b>0.0025</b>		0.0025		mg/L		08/14/24 15:40	08/16/24 20:51	1
Thallium	<0.0020		0.0020		mg/L		08/14/24 15:40	08/16/24 20:51	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/20/24 10:35	08/21/24 05:32	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>750</b>		10		mg/L			08/04/24 23:22	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>150</b>		10		mg/L			08/04/24 13:24	5
<b>Fluoride (SM 4500 F C)</b>	<b>0.31</b>		0.10		mg/L			08/15/24 13:11	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>140</b>		25		mg/L			07/31/24 18:01	5

# Client Sample Results

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

Job ID: 500-254274-1

**Client Sample ID: MW-10**  
**Date Collected: 07/30/24 13:46**  
**Date Received: 07/31/24 08:55**

**Lab Sample ID: 500-254274-4**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/14/24 15:40	08/16/24 20:58	1
Arsenic	<0.0010		0.0010		mg/L		08/14/24 15:40	08/16/24 20:58	1
<b>Barium</b>	<b>0.045</b>		0.0025		mg/L		08/14/24 15:40	08/16/24 20:58	1
Beryllium	<0.0010		0.0010		mg/L		08/14/24 15:40	08/16/24 20:58	1
<b>Boron</b>	<b>0.44</b>		0.050		mg/L		08/14/24 15:40	08/16/24 20:58	1
Cadmium	<0.00050		0.00050		mg/L		08/14/24 15:40	08/16/24 20:58	1
<b>Calcium</b>	<b>120</b>		0.20		mg/L		08/14/24 15:40	08/16/24 20:58	1
Chromium	<0.0050		0.0050		mg/L		08/14/24 15:40	08/16/24 20:58	1
Cobalt	<0.0010		0.0010		mg/L		08/14/24 15:40	08/16/24 20:58	1
Lead	<0.00050	^1+	0.00050		mg/L		08/14/24 15:40	08/16/24 20:58	1
<b>Lithium</b>	<b>0.013</b>		0.010		mg/L		08/14/24 15:40	08/16/24 20:58	1
<b>Molybdenum</b>	<b>0.0071</b>		0.0050		mg/L		08/14/24 15:40	08/16/24 20:58	1
Selenium	<0.0025		0.0025		mg/L		08/14/24 15:40	08/16/24 20:58	1
Thallium	<0.0020		0.0020		mg/L		08/14/24 15:40	08/16/24 20:58	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/20/24 10:35	08/21/24 05:34	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>880</b>		10		mg/L			08/04/24 23:25	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>170</b>		10		mg/L			08/04/24 13:25	5
<b>Fluoride (SM 4500 F C)</b>	<b>0.38</b>		0.10		mg/L			08/15/24 13:15	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>150</b>		25		mg/L			07/31/24 18:00	5

# Client Sample Results

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

Job ID: 500-254274-1

**Client Sample ID: Duplicate**

**Lab Sample ID: 500-254274-5**

Date Collected: 07/30/24 00:00

Matrix: Water

Date Received: 07/31/24 08:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/14/24 15:40	08/16/24 21:00	1
<b>Arsenic</b>	<b>0.0014</b>		0.0010		mg/L		08/14/24 15:40	08/16/24 21:00	1
<b>Barium</b>	<b>0.075</b>		0.0025		mg/L		08/14/24 15:40	08/16/24 21:00	1
Beryllium	<0.0010		0.0010		mg/L		08/14/24 15:40	08/16/24 21:00	1
<b>Boron</b>	<b>0.34</b>		0.050		mg/L		08/14/24 15:40	08/16/24 21:00	1
Cadmium	<0.00050		0.00050		mg/L		08/14/24 15:40	08/16/24 21:00	1
<b>Calcium</b>	<b>110</b>		0.20		mg/L		08/14/24 15:40	08/16/24 21:00	1
Chromium	<0.0050		0.0050		mg/L		08/14/24 15:40	08/16/24 21:00	1
<b>Cobalt</b>	<b>0.0082</b>		0.0010		mg/L		08/14/24 15:40	08/16/24 21:00	1
Lead	<0.00050	^1+	0.00050		mg/L		08/14/24 15:40	08/16/24 21:00	1
<b>Lithium</b>	<b>0.013</b>		0.010		mg/L		08/14/24 15:40	08/16/24 21:00	1
<b>Molybdenum</b>	<b>0.0056</b>		0.0050		mg/L		08/14/24 15:40	08/16/24 21:00	1
Selenium	<0.0025		0.0025		mg/L		08/14/24 15:40	08/16/24 21:00	1
Thallium	<0.0020		0.0020		mg/L		08/14/24 15:40	08/16/24 21:00	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/20/24 10:35	08/21/24 05:36	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>800</b>		10		mg/L			08/04/24 23:28	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>170</b>		10		mg/L			08/04/24 13:25	5
<b>Fluoride (SM 4500 F C)</b>	<b>0.42</b>		0.10		mg/L			08/15/24 13:20	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>130</b>		25		mg/L			07/31/24 18:01	5



# Definitions/Glossary

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

Job ID: 500-254274-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.

## 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: 500-254274-1

## Metals

### Prep Batch: 781451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254274-1	MW-03	Total Recoverable	Water	3005A	
500-254274-2	MW-04	Total Recoverable	Water	3005A	
500-254274-3	MW-05	Total Recoverable	Water	3005A	
500-254274-4	MW-10	Total Recoverable	Water	3005A	
500-254274-5	Duplicate	Total Recoverable	Water	3005A	
MB 500-781451/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-781451/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Analysis Batch: 782080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254274-1	MW-03	Total Recoverable	Water	6020B	781451
500-254274-2	MW-04	Total Recoverable	Water	6020B	781451
500-254274-3	MW-05	Total Recoverable	Water	6020B	781451
500-254274-4	MW-10	Total Recoverable	Water	6020B	781451
500-254274-5	Duplicate	Total Recoverable	Water	6020B	781451
MB 500-781451/1-A	Method Blank	Total Recoverable	Water	6020B	781451
LCS 500-781451/2-A	Lab Control Sample	Total Recoverable	Water	6020B	781451

### Prep Batch: 782375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254274-1	MW-03	Total/NA	Water	7470A	
500-254274-2	MW-04	Total/NA	Water	7470A	
500-254274-3	MW-05	Total/NA	Water	7470A	
500-254274-4	MW-10	Total/NA	Water	7470A	
500-254274-5	Duplicate	Total/NA	Water	7470A	
MB 500-782375/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-782375/13-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 500-782375/34-A	Lab Control Sample Dup	Total/NA	Water	7470A	
500-254274-5 MS	Duplicate	Total/NA	Water	7470A	
500-254274-5 MSD	Duplicate	Total/NA	Water	7470A	
500-254274-5 DU	Duplicate	Total/NA	Water	7470A	

### Analysis Batch: 782508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254274-1	MW-03	Total/NA	Water	7470A	782375
500-254274-2	MW-04	Total/NA	Water	7470A	782375
500-254274-3	MW-05	Total/NA	Water	7470A	782375
500-254274-4	MW-10	Total/NA	Water	7470A	782375
500-254274-5	Duplicate	Total/NA	Water	7470A	782375
MB 500-782375/12-A	Method Blank	Total/NA	Water	7470A	782375
LCS 500-782375/13-A	Lab Control Sample	Total/NA	Water	7470A	782375
LCSD 500-782375/34-A	Lab Control Sample Dup	Total/NA	Water	7470A	782375
500-254274-5 MS	Duplicate	Total/NA	Water	7470A	782375
500-254274-5 MSD	Duplicate	Total/NA	Water	7470A	782375
500-254274-5 DU	Duplicate	Total/NA	Water	7470A	782375

## General Chemistry

### Analysis Batch: 779372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254274-3	MW-05	Total/NA	Water	SM 4500 SO4 E	

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# QC Association Summary

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

Job ID: 500-254274-1

## General Chemistry (Continued)

### Analysis Batch: 779372 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254274-4	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-254274-5	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-779372/60	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-779372/61	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

### Analysis Batch: 779787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254274-1	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-254274-2	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-254274-3	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-254274-4	MW-10	Total/NA	Water	SM 4500 Cl- E	
500-254274-5	Duplicate	Total/NA	Water	SM 4500 Cl- E	
MB 500-779787/16	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-779787/17	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

### Analysis Batch: 779809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254274-1	MW-03	Total/NA	Water	SM 2540C	
500-254274-2	MW-04	Total/NA	Water	SM 2540C	
500-254274-3	MW-05	Total/NA	Water	SM 2540C	
500-254274-4	MW-10	Total/NA	Water	SM 2540C	
500-254274-5	Duplicate	Total/NA	Water	SM 2540C	
MB 500-779809/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-779809/2	Lab Control Sample	Total/NA	Water	SM 2540C	

### Analysis Batch: 779975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254274-1	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-254274-2	MW-04	Total/NA	Water	SM 4500 SO4 E	
MB 500-779975/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-779975/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

### Analysis Batch: 781815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254274-1	MW-03	Total/NA	Water	SM 4500 F C	
500-254274-2	MW-04	Total/NA	Water	SM 4500 F C	
500-254274-3	MW-05	Total/NA	Water	SM 4500 F C	
500-254274-4	MW-10	Total/NA	Water	SM 4500 F C	
500-254274-5	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-781815/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-781815/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

# QC Sample Results

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

Job ID: 500-254274-1

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

**Lab Sample ID: MB 500-781451/1-A**  
**Matrix: Water**  
**Analysis Batch: 782080**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 781451**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/14/24 15:40	08/16/24 20:31	1
Arsenic	<0.0010		0.0010		mg/L		08/14/24 15:40	08/16/24 20:31	1
Barium	<0.0025		0.0025		mg/L		08/14/24 15:40	08/16/24 20:31	1
Beryllium	<0.0010		0.0010		mg/L		08/14/24 15:40	08/16/24 20:31	1
Boron	<0.050		0.050		mg/L		08/14/24 15:40	08/16/24 20:31	1
Cadmium	<0.00050		0.00050		mg/L		08/14/24 15:40	08/16/24 20:31	1
Calcium	<0.20		0.20		mg/L		08/14/24 15:40	08/16/24 20:31	1
Chromium	<0.0050		0.0050		mg/L		08/14/24 15:40	08/16/24 20:31	1
Cobalt	<0.0010		0.0010		mg/L		08/14/24 15:40	08/16/24 20:31	1
Lead	<0.00050	^1+	0.00050		mg/L		08/14/24 15:40	08/16/24 20:31	1
Lithium	<0.010		0.010		mg/L		08/14/24 15:40	08/16/24 20:31	1
Molybdenum	<0.0050		0.0050		mg/L		08/14/24 15:40	08/16/24 20:31	1
Selenium	<0.0025		0.0025		mg/L		08/14/24 15:40	08/16/24 20:31	1
Thallium	<0.0020		0.0020		mg/L		08/14/24 15:40	08/16/24 20:31	1

**Lab Sample ID: LCS 500-781451/2-A**  
**Matrix: Water**  
**Analysis Batch: 782080**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 781451**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.529		mg/L		106	80 - 120
Arsenic	0.100	0.103		mg/L		103	80 - 120
Barium	0.500	0.527		mg/L		105	80 - 120
Beryllium	0.0500	0.0502		mg/L		100	80 - 120
Boron	1.00	1.05		mg/L		105	80 - 120
Cadmium	0.0500	0.0518		mg/L		104	80 - 120
Calcium	10.0	8.71		mg/L		87	80 - 120
Chromium	0.200	0.212		mg/L		106	80 - 120
Cobalt	0.500	0.537		mg/L		107	80 - 120
Lead	0.100	0.107	^1+	mg/L		107	80 - 120
Lithium	0.100	0.107		mg/L		107	80 - 120
Molybdenum	1.00	1.00		mg/L		100	80 - 120
Selenium	0.100	0.104		mg/L		104	80 - 120
Thallium	0.100	0.106		mg/L		106	80 - 120

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 500-782375/12-A**  
**Matrix: Water**  
**Analysis Batch: 782508**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 782375**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/20/24 10:35	08/21/24 05:24	1

# QC Sample Results

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

Job ID: 500-254274-1

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

**Lab Sample ID: LCS 500-782375/13-A**  
**Matrix: Water**  
**Analysis Batch: 782508**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 782375**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00200	0.00208		mg/L		104	80 - 120

**Lab Sample ID: LCSD 500-782375/34-A**  
**Matrix: Water**  
**Analysis Batch: 782508**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 782375**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.00200	0.00200		mg/L		100	80 - 120	4	20

**Lab Sample ID: 500-254274-5 MS**  
**Matrix: Water**  
**Analysis Batch: 782508**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 782375**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.00020		0.000999	0.000943		mg/L		94	75 - 125

**Lab Sample ID: 500-254274-5 MSD**  
**Matrix: Water**  
**Analysis Batch: 782508**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 782375**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.00020		0.000999	0.000926		mg/L		93	75 - 125	2	20

**Lab Sample ID: 500-254274-5 DU**  
**Matrix: Water**  
**Analysis Batch: 782508**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 782375**

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.00020			<0.00020		mg/L				NC	20

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

**Lab Sample ID: MB 500-779809/1**  
**Matrix: Water**  
**Analysis Batch: 779809**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			08/04/24 22:39	1

**Lab Sample ID: LCS 500-779809/2**  
**Matrix: Water**  
**Analysis Batch: 779809**

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

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

# QC Sample Results

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

Job ID: 500-254274-1

## Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-779787/16  
 Matrix: Water  
 Analysis Batch: 779787

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			08/04/24 13:04	1

Lab Sample ID: LCS 500-779787/17  
 Matrix: Water  
 Analysis Batch: 779787

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	19.8		mg/L		99	85 - 115

## Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-781815/3  
 Matrix: Water  
 Analysis Batch: 781815

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			08/15/24 12:36	1

Lab Sample ID: LCS 500-781815/4  
 Matrix: Water  
 Analysis Batch: 781815

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	9.52		mg/L		95	90 - 119

## Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-779372/60  
 Matrix: Water  
 Analysis Batch: 779372

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			07/31/24 17:35	1

Lab Sample ID: LCS 500-779372/61  
 Matrix: Water  
 Analysis Batch: 779372

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

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

Lab Sample ID: MB 500-779975/16  
 Matrix: Water  
 Analysis Batch: 779975

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			08/05/24 16:17	1

# QC Sample Results

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

Job ID: 500-254274-1

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

Lab Sample ID: LCS 500-779975/17  
Matrix: Water  
Analysis Batch: 779975

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

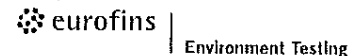
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	20.0	22.7		mg/L		113	88 - 123

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**Eurofins Chicago**

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

**Chain of Custody Record**



<b>Client Information</b>		Sampler: <b>JAN JOHN KAWKSON</b>		Lab PM: Mockler, Diana J		Carrier Tracking No(s):		COC No: 500-126445-45941.1	
Client Contact: Patrick Allenstein		Phone: <b>620 290 6850</b>		E-Mail: Diana.Mockler@et.eurofinsus.com		State of Origin:		Page: Page 1 of 1	
Company: KPRG and Associates, Inc.		PWSID:		Analysis Requested		Job #: <b>500-254274</b>		Preservation Codes: D - HNO3 N - None	
Address: 14665 West Lisbon Road, Suite 1A		Due Date Requested:							
City: Brookfield		TAT Requested (days):							
State, Zip: WI, 53005		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		PO #: 4502153835		WVO #:		Other:	
Phone: 500-254274 COC		Project Name: Joliet #29 CCR/ Event Desc: Quarterly MWG Joliet #29 CCR		Project #: 50011568		SSOW#:		Special Instructions/Note:	
Email: patricka@kprginc.com		Site: Illinois		Matrix (W=water, S=solid, O=wastefoil, BT=Tissue, A=Air)		Field/Filtered Sample (Yes or No)		Total Number of Containers	
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix	Field/Filtered Sample	6010C, 6020A, 7470A	2540C, 4500_F_C, SM4500_CL_E, SM4500_SO4_E	903.0, 904.0	Other
<b>Possible Hazard Identification</b>					<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>				
<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 Relinquish by:		Date:		Time:		Method of Shipment:			
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:				
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:			4.9→4.8, 4.4→4.3				



# Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-254274-1

**Login Number: 254274**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.8,4.3
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").	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: 500-254274-1

**Client Sample ID: MW-03**  
**Date Collected: 07/30/24 10:25**  
**Date Received: 07/31/24 08:55**

**Lab Sample ID: 500-254274-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			781451	S1Z	EET CHI	08/14/24 15:40 - 08/14/24 21:40 <sup>1</sup>
Total Recoverable	Analysis	6020B		1	782080	RN	EET CHI	08/16/24 20:47
Total/NA	Prep	7470A			782375	MJG	EET CHI	08/20/24 10:35 - 08/20/24 12:35 <sup>1</sup>
Total/NA	Analysis	7470A		1	782508	MJG	EET CHI	08/21/24 05:28
Total/NA	Analysis	SM 2540C		1	779809	CLB	EET CHI	08/04/24 23:17
Total/NA	Analysis	SM 4500 CI- E		5	779787	TR	EET CHI	08/04/24 13:24
Total/NA	Analysis	SM 4500 F C		1	781815	SO	EET CHI	08/15/24 13:02
Total/NA	Analysis	SM 4500 SO4 E		5	779975	TR	EET CHI	08/05/24 16:18

**Client Sample ID: MW-04**  
**Date Collected: 07/30/24 09:14**  
**Date Received: 07/31/24 08:55**

**Lab Sample ID: 500-254274-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			781451	S1Z	EET CHI	08/14/24 15:40 - 08/14/24 21:40 <sup>1</sup>
Total Recoverable	Analysis	6020B		1	782080	RN	EET CHI	08/16/24 20:49
Total/NA	Prep	7470A			782375	MJG	EET CHI	08/20/24 10:35 - 08/20/24 12:35 <sup>1</sup>
Total/NA	Analysis	7470A		1	782508	MJG	EET CHI	08/21/24 05:30
Total/NA	Analysis	SM 2540C		1	779809	CLB	EET CHI	08/04/24 23:20
Total/NA	Analysis	SM 4500 CI- E		5	779787	TR	EET CHI	08/04/24 13:24
Total/NA	Analysis	SM 4500 F C		1	781815	SO	EET CHI	08/15/24 13:06
Total/NA	Analysis	SM 4500 SO4 E		5	779975	TR	EET CHI	08/05/24 16:18

**Client Sample ID: MW-05**  
**Date Collected: 07/30/24 11:50**  
**Date Received: 07/31/24 08:55**

**Lab Sample ID: 500-254274-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			781451	S1Z	EET CHI	08/14/24 15:40 - 08/14/24 21:40 <sup>1</sup>
Total Recoverable	Analysis	6020B		1	782080	RN	EET CHI	08/16/24 20:51
Total/NA	Prep	7470A			782375	MJG	EET CHI	08/20/24 10:35 - 08/20/24 12:35 <sup>1</sup>
Total/NA	Analysis	7470A		1	782508	MJG	EET CHI	08/21/24 05:32
Total/NA	Analysis	SM 2540C		1	779809	CLB	EET CHI	08/04/24 23:22
Total/NA	Analysis	SM 4500 CI- E		5	779787	TR	EET CHI	08/04/24 13:24
Total/NA	Analysis	SM 4500 F C		1	781815	SO	EET CHI	08/15/24 13:11
Total/NA	Analysis	SM 4500 SO4 E		5	779372	TR	EET CHI	07/31/24 18:01

**Client Sample ID: MW-10**  
**Date Collected: 07/30/24 13:46**  
**Date Received: 07/31/24 08:55**

**Lab Sample ID: 500-254274-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			781451	S1Z	EET CHI	08/14/24 15:40 - 08/14/24 21:40 <sup>1</sup>
Total Recoverable	Analysis	6020B		1	782080	RN	EET CHI	08/16/24 20:58

# Lab Chronicle

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

Job ID: 500-254274-1

**Client Sample ID: MW-10**  
**Date Collected: 07/30/24 13:46**  
**Date Received: 07/31/24 08:55**

**Lab Sample ID: 500-254274-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			782375	MJG	EET CHI	08/20/24 10:35 - 08/20/24 12:35 <sup>1</sup>
Total/NA	Analysis	7470A		1	782508	MJG	EET CHI	08/21/24 05:34
Total/NA	Analysis	SM 2540C		1	779809	CLB	EET CHI	08/04/24 23:25
Total/NA	Analysis	SM 4500 Cl- E		5	779787	TR	EET CHI	08/04/24 13:25
Total/NA	Analysis	SM 4500 F C		1	781815	SO	EET CHI	08/15/24 13:15
Total/NA	Analysis	SM 4500 SO4 E		5	779372	TR	EET CHI	07/31/24 18:00

**Client Sample ID: Duplicate**  
**Date Collected: 07/30/24 00:00**  
**Date Received: 07/31/24 08:55**

**Lab Sample ID: 500-254274-5**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			781451	S1Z	EET CHI	08/14/24 15:40 - 08/14/24 21:40 <sup>1</sup>
Total Recoverable	Analysis	6020B		1	782080	RN	EET CHI	08/16/24 21:00
Total/NA	Prep	7470A			782375	MJG	EET CHI	08/20/24 10:35 - 08/20/24 12:35 <sup>1</sup>
Total/NA	Analysis	7470A		1	782508	MJG	EET CHI	08/21/24 05:36
Total/NA	Analysis	SM 2540C		1	779809	CLB	EET CHI	08/04/24 23:28
Total/NA	Analysis	SM 4500 Cl- E		5	779787	TR	EET CHI	08/04/24 13:25
Total/NA	Analysis	SM 4500 F C		1	781815	SO	EET CHI	08/15/24 13:20
Total/NA	Analysis	SM 4500 SO4 E		5	779372	TR	EET CHI	07/31/24 18:01

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

**Laboratory References:**

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

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

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

Generated 9/5/2024 12:42:53 PM

**JOB DESCRIPTION**

Joliet #29 CCR (RAD)

**JOB NUMBER**

500-254274-2

# Eurofins Chicago

## Job Notes

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

## Authorization



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



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# Case Narrative

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

Job ID: 500-254274-2

**Job ID: 500-254274-2**

**Eurofins Chicago**

**Job Narrative  
500-254274-2**

## Receipt

The samples were received on 7/31/2024 8:55 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 4.3°C and 4.8°C.

## Gas Flow Proportional Counter

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

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# Method Summary

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

Job ID: 500-254274-2

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: 500-254274-2

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
500-254274-1	MW-03	Water	07/30/24 10:25	07/31/24 08:55
500-254274-2	MW-04	Water	07/30/24 09:14	07/31/24 08:55
500-254274-3	MW-05	Water	07/30/24 11:50	07/31/24 08:55
500-254274-4	MW-10	Water	07/30/24 13:46	07/31/24 08:55
500-254274-5	Duplicate	Water	07/30/24 00:00	07/31/24 08:55

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# Client Sample Results

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

Job ID: 500-254274-2

**Client Sample ID: MW-03**  
**Date Collected: 07/30/24 10:25**  
**Date Received: 07/31/24 08:55**

**Lab Sample ID: 500-254274-1**  
**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	0.108		0.0665	0.0672	1.00	0.0844	pCi/L	08/08/24 07:47	09/03/24 14:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.9		30 - 110					08/08/24 07:47	09/03/24 14:50	1

**Method: EPA 904.0 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.388	U	0.362	0.364	1.00	0.577	pCi/L	08/08/24 07:52	08/16/24 11:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.9		30 - 110					08/08/24 07:52	08/16/24 11:49	1
Y Carrier	83.4		30 - 110					08/08/24 07:52	08/16/24 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	0.497	U	0.368	0.370	5.00	0.577	pCi/L		09/05/24 10:11	1

# Client Sample Results

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

Job ID: 500-254274-2

**Client Sample ID: MW-04**  
**Date Collected: 07/30/24 09:14**  
**Date Received: 07/31/24 08:55**

**Lab Sample ID: 500-254274-2**  
**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	0.111		0.0637	0.0644	1.00	0.0765	pCi/L	08/08/24 07:47	09/03/24 14:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		30 - 110					08/08/24 07:47	09/03/24 14:50	1

**Method: EPA 904.0 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.167	U	0.275	0.275	1.00	0.471	pCi/L	08/08/24 07:52	08/16/24 11:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		30 - 110					08/08/24 07:52	08/16/24 11:49	1
Y Carrier	85.2		30 - 110					08/08/24 07:52	08/16/24 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	0.278	U	0.282	0.282	5.00	0.471	pCi/L		09/05/24 10:11	1

# Client Sample Results

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

Job ID: 500-254274-2

**Client Sample ID: MW-05**  
**Date Collected: 07/30/24 11:50**  
**Date Received: 07/31/24 08:55**

**Lab Sample ID: 500-254274-3**  
**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	0.123		0.0670	0.0679	1.00	0.0800	pCi/L	08/08/24 07:47	09/03/24 14:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.5		30 - 110					08/08/24 07:47	09/03/24 14:50	1

**Method: EPA 904.0 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.159	U	0.283	0.284	1.00	0.488	pCi/L	08/08/24 07:52	08/16/24 11:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.5		30 - 110					08/08/24 07:52	08/16/24 11:50	1
Y Carrier	85.2		30 - 110					08/08/24 07:52	08/16/24 11:50	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	0.281	U	0.291	0.292	5.00	0.488	pCi/L		09/05/24 10:11	1

# Client Sample Results

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

Job ID: 500-254274-2

**Client Sample ID: MW-10**

**Lab Sample ID: 500-254274-4**

Date Collected: 07/30/24 13:46

Matrix: Water

Date Received: 07/31/24 08:55

**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	0.0440	U	0.0511	0.0513	1.00	0.0825	pCi/L	08/08/24 07:47	09/03/24 14:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.6		30 - 110					08/08/24 07:47	09/03/24 14:50	1

**Method: EPA 904.0 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.411	U	0.301	0.303	1.00	0.453	pCi/L	08/08/24 07:52	08/16/24 11:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.6		30 - 110					08/08/24 07:52	08/16/24 11:50	1
Y Carrier	87.9		30 - 110					08/08/24 07:52	08/16/24 11:50	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
<b>Combined Radium 226 + 228</b>	<b>0.455</b>		0.305	0.307	5.00	0.453	pCi/L		09/05/24 10:11	1

# Client Sample Results

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

Job ID: 500-254274-2

**Client Sample ID: Duplicate**

**Lab Sample ID: 500-254274-5**

Date Collected: 07/30/24 00:00

Matrix: Water

Date Received: 07/31/24 08:55

**Method: EPA 903.0 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0966		0.0690	0.0695	1.00	0.0953	pCi/L	08/08/24 07:47	09/03/24 14:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		30 - 110					08/08/24 07:47	09/03/24 14:50	1

**Method: EPA 904.0 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.363	U	0.345	0.346	1.00	0.550	pCi/L	08/08/24 07:52	08/16/24 11:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		30 - 110					08/08/24 07:52	08/16/24 11:50	1
Y Carrier	85.6		30 - 110					08/08/24 07:52	08/16/24 11:50	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	0.459	U	0.352	0.353	5.00	0.550	pCi/L		09/05/24 10:11	1

# Definitions/Glossary

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

Job ID: 500-254274-2

## 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: 500-254274-2

## Rad

### Prep Batch: 674253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254274-1	MW-03	Total/NA	Water	PrecSep-21	
500-254274-2	MW-04	Total/NA	Water	PrecSep-21	
500-254274-3	MW-05	Total/NA	Water	PrecSep-21	
500-254274-4	MW-10	Total/NA	Water	PrecSep-21	
500-254274-5	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-674253/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-674253/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-254274-3 DU	MW-05	Total/NA	Water	PrecSep-21	

### Prep Batch: 674254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254274-1	MW-03	Total/NA	Water	PrecSep_0	
500-254274-2	MW-04	Total/NA	Water	PrecSep_0	
500-254274-3	MW-05	Total/NA	Water	PrecSep_0	
500-254274-4	MW-10	Total/NA	Water	PrecSep_0	
500-254274-5	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-674254/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-674254/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-254274-3 DU	MW-05	Total/NA	Water	PrecSep_0	



# QC Sample Results

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

Job ID: 500-254274-2

## Method: 903.0 - Radium-226 (GFPC)

**Lab Sample ID: MB 160-674253/1-A**  
**Matrix: Water**  
**Analysis Batch: 677423**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 674253**

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.04662	U	0.0624	0.0626	1.00	0.105	pCi/L	08/08/24 07:47	08/30/24 17:51	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
	%Yield	Qualifier								
Ba Carrier	94.8		30 - 110			08/08/24 07:47	08/30/24 17:51	1		

**Lab Sample ID: LCS 160-674253/2-A**  
**Matrix: Water**  
**Analysis Batch: 677423**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 674253**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	9.58	10.16		1.05	1.00	0.0926	pCi/L	106	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Ba Carrier	94.1		30 - 110						

**Lab Sample ID: 500-254274-3 DU**  
**Matrix: Water**  
**Analysis Batch: 677738**

**Client Sample ID: MW-05**  
**Prep Type: Total/NA**  
**Prep Batch: 674253**

Analyte	Sample Sample		DU	DU	Total	RL	MDC	Unit	RER	RER Limit
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					
Radium-226	0.123		0.07832		0.0540	1.00	0.0685	pCi/L	0.36	1
Carrier	DU %Yield	DU Qualifier	Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	96.8		30 - 110							

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

**Lab Sample ID: MB 160-674254/1-A**  
**Matrix: Water**  
**Analysis Batch: 675292**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 674254**

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.3593	U	0.420	0.421	1.00	0.691	pCi/L	08/08/24 07:52	08/16/24 11:48	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
	%Yield	Qualifier								
Ba Carrier	94.8		30 - 110			08/08/24 07:52	08/16/24 11:48	1		
Y Carrier	68.8		30 - 110			08/08/24 07:52	08/16/24 11:48	1		

# QC Sample Results

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

Job ID: 500-254274-2

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

**Lab Sample ID: LCS 160-674254/2-A**  
**Matrix: Water**  
**Analysis Batch: 675292**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 674254**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	8.60	9.886		1.31	1.00	0.502	pCi/L	115	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	94.1		30 - 110
Y Carrier	86.0		30 - 110

**Lab Sample ID: 500-254274-3 DU**  
**Matrix: Water**  
**Analysis Batch: 675292**

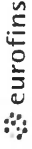
**Client Sample ID: MW-05**  
**Prep Type: Total/NA**  
**Prep Batch: 674254**

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.159	U	0.1016	U	0.251	1.00	0.445	pCi/L	0.11	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	96.8		30 - 110
Y Carrier	84.5		30 - 110

# Chain of Custody Record



<b>Client Information (Sub Contract Lab)</b>		Lab PM: Mockler, Diana J		Carmer Tracking No(s):		GOC No: 500-191136-1	
Client Contact		E-Mail: Diana.Mockler@eurofins.com		State of Origin: Illinois		Page: Page 1 of 1	
Shipping/Receiving Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #		500-254274-2	
Address: 13715 Rider Trail North,		Due Date Requested: 8/29/2024		Analysis Requested		Preservation Codes:	
City: Earth City		TAT Requested (days):		Perform MS/MSD (Yes or No)		Total Number of Containers	
State, Zip: MO, 63045		PO #		Field Filtered Sample (Yes or No)		Other:	
Phone: 314-298-8586(Tel) 314-298-8757(Fax)		WO #		903.0/PrecSep_21 Standard Target List		Special Instructions/Note:	
Email:		Project #		904.0/PrecSep_0 Standard Target List		Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume.	
Project Name: Joliet #29 CCR		50011568		Raz26Ra228_GFPc		Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume.	
Site: NRG Midwest Generation LSQ Joliet#29 CCR		SSOW#				Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume.	
<b>Sample Identification - Client ID (Lab ID)</b>		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
MW-03 (500-254274-1)		7/30/24		10:25 Central		Water	
MW-04 (500-254274-2)		7/30/24		09:14 Central		Water	
MW-05 (500-254274-3)		7/30/24		11:50 Central		Water	
MW-10 (500-254274-4)		7/30/24		13:46 Central		Water	
Duplicate (500-254274-5)		7/30/24		Central		Water	
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/test/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							
<b>Possible Hazard Identification</b>							
Unconfirmed							
Deliverable Requested: I, II, III, IV, Other (specify)		Primary Deliverable Rank: 2					
Empty Kit Relinquished by:		Date:		Method of Shipment:		Months:	
Relinquished by: <i>M. Piroette</i>		Date: 07/31/24 1530		Received by: <i>AM. Piroette</i>		Date/Time: AUG 01 2024 0840	
Relinquished by:		Date/Time:		Company:		Company:	
Relinquished by:		Date/Time:		Company:		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:			

# Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-254274-2

**Login Number: 254274**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.8,4.3
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: 500-254274-2

**Login Number: 254274**

**List Number: 2**

**Creator: Pinette, Meadow L**

**List Source: Eurofins St. Louis**

**List Creation: 08/01/24 01:31 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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (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 (RAD)

Job ID: 500-254274-2

## Client Sample ID: MW-03

Date Collected: 07/30/24 10:25

Date Received: 07/31/24 08:55

## Lab Sample ID: 500-254274-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			674253	MLT	EET SL	08/08/24 07:47
Total/NA	Analysis	903.0		1	677738	SWS	EET SL	09/03/24 14:50
Total/NA	Prep	PrecSep_0			674254	MLT	EET SL	08/08/24 07:52
Total/NA	Analysis	904.0		1	675292	SWS	EET SL	08/16/24 11:49
Total/NA	Analysis	Ra226_Ra228		1	677882	FLC	EET SL	09/05/24 10:11

## Client Sample ID: MW-04

Date Collected: 07/30/24 09:14

Date Received: 07/31/24 08:55

## Lab Sample ID: 500-254274-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			674253	MLT	EET SL	08/08/24 07:47
Total/NA	Analysis	903.0		1	677738	SWS	EET SL	09/03/24 14:50
Total/NA	Prep	PrecSep_0			674254	MLT	EET SL	08/08/24 07:52
Total/NA	Analysis	904.0		1	675292	SWS	EET SL	08/16/24 11:49
Total/NA	Analysis	Ra226_Ra228		1	677882	FLC	EET SL	09/05/24 10:11

## Client Sample ID: MW-05

Date Collected: 07/30/24 11:50

Date Received: 07/31/24 08:55

## Lab Sample ID: 500-254274-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			674253	MLT	EET SL	08/08/24 07:47
Total/NA	Analysis	903.0		1	677738	SWS	EET SL	09/03/24 14:50
Total/NA	Prep	PrecSep_0			674254	MLT	EET SL	08/08/24 07:52
Total/NA	Analysis	904.0		1	675292	SWS	EET SL	08/16/24 11:50
Total/NA	Analysis	Ra226_Ra228		1	677882	FLC	EET SL	09/05/24 10:11

## Client Sample ID: MW-10

Date Collected: 07/30/24 13:46

Date Received: 07/31/24 08:55

## Lab Sample ID: 500-254274-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			674253	MLT	EET SL	08/08/24 07:47
Total/NA	Analysis	903.0		1	677738	SWS	EET SL	09/03/24 14:50
Total/NA	Prep	PrecSep_0			674254	MLT	EET SL	08/08/24 07:52
Total/NA	Analysis	904.0		1	675292	SWS	EET SL	08/16/24 11:50
Total/NA	Analysis	Ra226_Ra228		1	677882	FLC	EET SL	09/05/24 10:11

# Lab Chronicle

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

Job ID: 500-254274-2

**Client Sample ID: Duplicate**

**Lab Sample ID: 500-254274-5**

**Date Collected: 07/30/24 00:00**

**Matrix: Water**

**Date Received: 07/31/24 08:55**

<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			674253	MLT	EET SL	08/08/24 07:47
Total/NA	Analysis	903.0		1	677738	SWS	EET SL	09/03/24 14:50
Total/NA	Prep	PrecSep_0			674254	MLT	EET SL	08/08/24 07:52
Total/NA	Analysis	904.0		1	675292	SWS	EET SL	08/16/24 11:50
Total/NA	Analysis	Ra226_Ra228		1	677882	FLC	EET SL	09/05/24 10:11

**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: 500-254274-2

## 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)
500-254274-1	MW-03	88.9
500-254274-2	MW-04	92.6
500-254274-3	MW-05	97.5
500-254274-3 DU	MW-05	96.8
500-254274-4	MW-10	91.6
500-254274-5	Duplicate	84.3
LCS 160-674253/2-A	Lab Control Sample	94.1
MB 160-674253/1-A	Method Blank	94.8

#### 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)
500-254274-1	MW-03	88.9	83.4
500-254274-2	MW-04	92.6	85.2
500-254274-3	MW-05	97.5	85.2
500-254274-3 DU	MW-05	96.8	84.5
500-254274-4	MW-10	91.6	87.9
500-254274-5	Duplicate	84.3	85.6
LCS 160-674254/2-A	Lab Control Sample	94.1	86.0
MB 160-674254/1-A	Method Blank	94.8	68.8

#### Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier



PROJECT NAME	NRG - JOLIET #29 STATION (12313.0)		DATE	7-30-24
Sample Name	MW-03	Start Time	10:10	
Condition of Well	GOOD			
Water Level	33.07	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	COLORLESS ODORLESS	
Volume Removed	2.0 QAS	W L at Sample Time	33.08	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCA + CCR	Sample Time	10:25	
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)
10:13	33.07	8.03	19.7	1.274	8.83	289.8	3.08
10:16	33.07	7.71	17.4	1.110	8.02	302.5	8.84
10:19	33.08	7.62	17.0	1.075	7.43	305.6	8.55
10:22	33.08	7.57	16.8	1.057	7.12	307.9	8.24
10:25	33.08	7.56	16.8	1.054	7.03	308.7	8.94

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

PROJECT NAME	NRG - JOLIET #29 STATION (12313.0)		DATE	7-30-24
Sample Name	MW-04	Start Time	08:56	
Condition of Well	GOOD			
Water Level	33.33	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	COLORLESS ODORLESS	
Volume Removed	2.75 Gals	W L at Sample Time	33.36	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCA + CCR + CCR DUP	Sample Time	09:14	
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)
08:59	33.34	7.86	17.0	1.122	8.32	261.2	2.31
09:02	33.35	7.65	16.3	1.054	7.46	270.4	3.26
09:05	33.35	7.50	18.7	1.087	6.95	275.0	3.71
09:08	33.35	7.46	19.4	1.118	6.71	279.6	4.27
09:11	33.36	7.45	19.6	1.121	7.45	282.8	5.01
09:14	33.36	7.45	19.3	1.111	7.46	284.6	5.04

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates



PROJECT NAME	NRG - JOLIET #29 STATION (12313.0)		DATE	7-30-24
Sample Name	MW-05	Start Time	11:35	
Condition of Well	GOOD			
Water Level	34.04	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	COLORLESS ODORLESS	
Volume Removed	2.0 GALS	WL at Sample Time	34.06	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCA + CLR	Sample Time	11:50	
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)
11:38	34.06	7.97	21.7	1.427	2.09	281.7	2.56
11:41	34.05	7.83	18.3	1.261	7.92	295.5	1.55
11:44	34.05	7.57	17.1	1.061	6.53	302.7	1.80
11:47	34.06	7.47	17.6	1.042	6.03	305.4	2.81
11:50	34.06	7.45	18.4	1.041	5.92	307.2	2.46

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates



PROJECT NAME	NRG - JOLIET #29 STATION (12313.0)		DATE	7-30-24
Sample Name	MW-10	Start Time	13:28	
Condition of Well	GOOD			
Water Level	34.24	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	COLORLESS ODORLESS	
Volume Removed	2.5 GALS	W L at Sample Time	34.26	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCA + CER	Sample Time	13:46	
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)
13:31	34.27	8.07	26.4	1.298	7.78	230.6	2.12
13:34	34.25	8.00	17.1	1.088	8.26	275.8	2.11
13:37	34.26	7.69	16.4	1.044	7.47	283.3	2.79
13:40	34.26	7.60	18.6	1.107	7.14	284.7	2.58
13:43	34.26	7.58	19.4	1.129	6.99	286.5	2.33
13:46	34.26	7.58	19.6	1.137	6.95	287.6	2.27

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

