

DATA SUMMARY POSTING

Station: Midwest Generation Will County Generating Station

Regulated Unit(s): Pond 2 S (IEPA ID No. W1978100011-03)
 Pond 3 S (IEPA ID No. W1978100011-04)

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 4th 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. Groundwater Turbidity - Ponds 2S and 3S, Midwest Generation, LLC, Will County Generating Station, Romeoville, IL.

Well ID	Date	Turbidity (NTU)
MW-05	2/23/2021	0.63
	4/10/2021	1.28
	4/25/2021	2.41
	5/24/2021	3.78
	6/11/2021	2.4
	6/28/2021	2.89
	7/12/2021	3.93
	8/4/2021	1.35
	8/24/2021	3.5
	9/24/2021	3.59
	11/23/2021	4.45
	2/24/2022	0.37
	6/16/2022	1.76
	8/25/2022	2.99
11/15/2022	38.9	
2/23/2023	2.18	
4/26/2023	1.6	
7/26/2023	7.1	
10/24/2023	0.8	
MW-06	2/23/2021	0.31
	4/10/2021	11.17
	4/25/2021	15.04
	5/24/2021	5.18
	6/11/2021	2.96
	6/29/2021	4.06
	7/12/2021	6.43
	8/4/2021	3.5
	8/24/2021	7.0
	9/24/2021	4.2
	11/23/2021	6.38
	2/22/2022	0.47
	6/14/2022	3.87
	8/25/2022	2.6
	11/16/2022	8.12
	2/23/2023	10.08
	4/26/2023	47.6
	7/26/2023	3.7
10/24/2023	0.8	
MW-09	3/1/2021	0.86
	4/10/2021	6.91
	4/25/2021	2.08
	5/25/2021	14.12
	6/11/2021	2.39
	6/29/2021	2.97
	7/12/2021	3.94
	8/4/2021	0.0
	8/25/2021	19.9
	9/24/2021	3.67
	11/23/2021	19.07
	2/22/2022	0.59
	6/15/2022	113.77
	8/25/2022	1.93
	11/16/2022	11.73
	2/23/2023	10.34
4/27/2023	2.9	
7/26/2023	6.5	
10/24/2023	9.5	
MW-10	2/25/2021	172.14
	4/10/2021	29.99
	4/25/2021	34.77
	5/25/2021	44.14
	6/11/2021	92.03
	6/29/2021	29.35
	7/12/2021	23.45
	8/4/2021	47.68
	8/26/2021	27.5
	9/24/2021	542
	11/23/2021	312.05
	2/24/2022	72.18
	6/14/2022	55.5
	8/25/2022	8.83
	11/16/2022	32.4
	2/23/2023	53.32
4/26/2023	85.3	
7/26/2023	1.4	
10/24/2023	5.4	
MW-11	4/10/2021	269.25
	4/25/2021	60.28
	5/25/2021	9.56
	6/11/2021	77.09
	6/29/2021	7.43
	7/12/2021	39.12
	8/4/2021	9.53
	8/26/2021	11.4
	9/24/2021	9.68
	11/23/2021	1.85
	2/23/2022	162.43
	6/13/2022	27.05
	8/23/2022	10.9
	11/16/2022	60.3
	2/21/2023	51.3
	4/25/2023	56.6
7/25/2023	1.0	
10/19/2023	3.9	
MW-12	4/10/2021	31.67
	4/25/2021	15.04
	5/25/2021	28.65
	6/11/2021	6.1
	6/29/2021	13.04
	7/12/2021	12.99
	8/4/2021	11.97
	8/26/2021	10.9
	9/24/2021	11.97
	11/23/2021	3.88
	2/24/2022	82.8
	6/13/2022	4.24
	8/23/2022	7.35
	11/16/2022	2.85
	2/21/2023	1.82
	4/25/2023	2.1
7/25/2023	6.8	
10/19/2023	3.0	

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

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JOB DESCRIPTION

Will County CCR

JOB NUMBER

500-241542-1

Eurofins Chicago

Job Notes

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Case Narrative

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241542-1

Job ID: 500-241542-1

Laboratory: Eurofins Chicago

Narrative

**Job Narrative
500-241542-1**

Receipt

The samples were received on 10/25/2023 9:30 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 1.8° C and 4.3° 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.

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Method Summary

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241542-1

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: Will County CCR

Job ID: 500-241542-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-241542-1	MW-05	Water	10/24/23 09:19	10/25/23 09:30
500-241542-2	MW-06	Water	10/24/23 10:29	10/25/23 09:30
500-241542-3	MW-09	Water	10/24/23 13:00	10/25/23 09:30
500-241542-4	MW-10	Water	10/24/23 11:38	10/25/23 09:30
500-241542-5	2S/3S Duplicate	Water	10/24/23 00:00	10/25/23 09:30

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Client Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR

Job ID: 500-241542-1

Client Sample ID: MW-05
Date Collected: 10/24/23 09:19
Date Received: 10/25/23 09:30

Lab Sample ID: 500-241542-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0014		0.0010		mg/L		11/03/23 09:16	11/10/23 03:37	1
Boron	6.8		0.50		mg/L		11/21/23 19:34	11/24/23 14:57	10
Barium	0.074		0.0025		mg/L		11/03/23 09:16	11/10/23 03:37	1
Beryllium	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 03:37	1
Calcium	140		0.20		mg/L		11/03/23 09:16	11/10/23 03:37	1
Cadmium	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:37	1
Cobalt	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 03:37	1
Chromium	<0.0050		0.0050		mg/L		11/03/23 09:16	11/10/23 03:37	1
Molybdenum	0.071		0.0050		mg/L		11/03/23 09:16	11/10/23 03:37	1
Lead	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:37	1
Antimony	<0.0030		0.0030		mg/L		11/03/23 09:16	11/10/23 03:37	1
Selenium	0.077		0.0025		mg/L		11/03/23 09:16	11/10/23 03:37	1
Thallium	<0.0020		0.0020		mg/L		11/03/23 09:16	11/10/23 03:37	1
Lithium	0.023		0.010		mg/L		11/14/23 09:28	11/16/23 02:58	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/13/23 15:10	11/14/23 10:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	850		10		mg/L			10/26/23 02:32	1
Chloride (SM 4500 Cl- E)	8.6		2.0		mg/L			10/30/23 14:10	1
Fluoride (SM 4500 F C)	0.52		0.10		mg/L			11/13/23 14:28	1
Sulfate (SM 4500 SO4 E)	210		100		mg/L			11/13/23 11:04	20

Client Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR

Job ID: 500-241542-1

Client Sample ID: MW-06

Lab Sample ID: 500-241542-2

Date Collected: 10/24/23 10:29

Matrix: Water

Date Received: 10/25/23 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0025		0.0010		mg/L		11/03/23 09:16	11/10/23 03:42	1
Boron	2.5		0.50		mg/L		11/21/23 19:34	11/24/23 15:01	10
Barium	0.079		0.0025		mg/L		11/03/23 09:16	11/10/23 03:42	1
Beryllium	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 03:42	1
Calcium	100		0.20		mg/L		11/03/23 09:16	11/10/23 03:42	1
Cadmium	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:42	1
Cobalt	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 03:42	1
Chromium	<0.0050		0.0050		mg/L		11/03/23 09:16	11/10/23 03:42	1
Molybdenum	0.021		0.0050		mg/L		11/03/23 09:16	11/10/23 03:42	1
Lead	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:42	1
Antimony	<0.0030		0.0030		mg/L		11/03/23 09:16	11/10/23 03:42	1
Selenium	<0.0025		0.0025		mg/L		11/03/23 09:16	11/10/23 03:42	1
Thallium	<0.0020		0.0020		mg/L		11/03/23 09:16	11/10/23 03:42	1
Lithium	0.020		0.010		mg/L		11/14/23 09:28	11/16/23 03:01	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/13/23 15:10	11/14/23 11:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	580		10		mg/L			10/26/23 02:34	1
Chloride (SM 4500 Cl- E)	13		2.0		mg/L			10/30/23 11:31	1
Fluoride (SM 4500 F C)	0.40		0.10		mg/L			11/13/23 14:32	1
Sulfate (SM 4500 SO4 E)	140		100		mg/L			11/13/23 11:04	20

Client Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR

Job ID: 500-241542-1

Client Sample ID: MW-09

Lab Sample ID: 500-241542-3

Date Collected: 10/24/23 13:00

Matrix: Water

Date Received: 10/25/23 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0099		0.0010		mg/L		11/03/23 09:16	11/10/23 03:46	1
Boron	2.0		0.50		mg/L		11/21/23 19:34	11/24/23 15:05	10
Barium	0.035		0.0025		mg/L		11/03/23 09:16	11/10/23 03:46	1
Beryllium	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 03:46	1
Calcium	41		0.20		mg/L		11/03/23 09:16	11/10/23 03:46	1
Cadmium	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:46	1
Cobalt	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 03:46	1
Chromium	<0.0050		0.0050		mg/L		11/03/23 09:16	11/10/23 03:46	1
Molybdenum	0.070		0.0050		mg/L		11/03/23 09:16	11/10/23 03:46	1
Lead	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:46	1
Antimony	<0.0030		0.0030		mg/L		11/03/23 09:16	11/10/23 03:46	1
Selenium	<0.0025		0.0025		mg/L		11/03/23 09:16	11/10/23 03:46	1
Thallium	<0.0020		0.0020		mg/L		11/03/23 09:16	11/10/23 03:46	1
Lithium	<0.010		0.010		mg/L		11/14/23 09:28	11/16/23 03:05	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/13/23 15:10	11/14/23 11:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	770		10		mg/L			10/26/23 02:37	1
Chloride (SM 4500 Cl- E)	200		40		mg/L			10/30/23 12:36	20
Fluoride (SM 4500 F C)	0.52		0.10		mg/L			11/13/23 14:47	1
Sulfate (SM 4500 SO4 E)	200		100		mg/L			11/13/23 11:03	20

Client Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR

Job ID: 500-241542-1

Client Sample ID: MW-10
Date Collected: 10/24/23 11:38
Date Received: 10/25/23 09:30

Lab Sample ID: 500-241542-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0087		0.0010		mg/L		11/03/23 09:16	11/10/23 03:59	1
Boron	2.9		0.50		mg/L		11/21/23 19:34	11/24/23 15:08	10
Barium	0.083		0.0025		mg/L		11/03/23 09:16	11/10/23 03:59	1
Beryllium	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 03:59	1
Calcium	99		0.20		mg/L		11/03/23 09:16	11/10/23 03:59	1
Cadmium	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:59	1
Cobalt	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 03:59	1
Chromium	<0.0050		0.0050		mg/L		11/03/23 09:16	11/10/23 03:59	1
Molybdenum	0.12		0.0050		mg/L		11/03/23 09:16	11/10/23 03:59	1
Lead	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:59	1
Antimony	<0.0030		0.0030		mg/L		11/03/23 09:16	11/10/23 03:59	1
Selenium	<0.0025		0.0025		mg/L		11/03/23 09:16	11/10/23 03:59	1
Thallium	<0.0020		0.0020		mg/L		11/03/23 09:16	11/10/23 03:59	1
Lithium	0.015		0.010		mg/L		11/14/23 09:28	11/16/23 03:08	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/13/23 15:10	11/14/23 11:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	920		10		mg/L			10/26/23 02:39	1
Chloride (SM 4500 Cl- E)	160		40		mg/L			10/30/23 12:36	20
Fluoride (SM 4500 F C)	0.89		0.10		mg/L			11/13/23 15:16	1
Sulfate (SM 4500 SO4 E)	230		100		mg/L			11/13/23 11:04	20

Client Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR

Job ID: 500-241542-1

Client Sample ID: 2S/3S Duplicate

Lab Sample ID: 500-241542-5

Date Collected: 10/24/23 00:00

Matrix: Water

Date Received: 10/25/23 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0014		0.0010		mg/L		11/03/23 09:16	11/10/23 04:03	1
Boron	7.0		0.50		mg/L		11/21/23 19:34	11/24/23 15:12	10
Barium	0.075		0.0025		mg/L		11/03/23 09:16	11/10/23 04:03	1
Beryllium	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 04:03	1
Calcium	140		0.20		mg/L		11/03/23 09:16	11/10/23 04:03	1
Cadmium	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 04:03	1
Cobalt	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 04:03	1
Chromium	<0.0050		0.0050		mg/L		11/03/23 09:16	11/10/23 04:03	1
Molybdenum	0.070		0.0050		mg/L		11/03/23 09:16	11/10/23 04:03	1
Lead	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 04:03	1
Antimony	<0.0030		0.0030		mg/L		11/03/23 09:16	11/10/23 04:03	1
Selenium	0.075		0.0025		mg/L		11/03/23 09:16	11/10/23 04:03	1
Thallium	<0.0020		0.0020		mg/L		11/03/23 09:16	11/10/23 04:03	1
Lithium	0.025		0.010		mg/L		11/14/23 09:28	11/16/23 03:12	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/13/23 15:10	11/14/23 11:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	900		10		mg/L			10/26/23 02:42	1
Chloride (SM 4500 Cl- E)	8.3		2.0		mg/L			10/30/23 14:11	1
Fluoride (SM 4500 F C)	0.49		0.10		mg/L			11/13/23 14:51	1
Sulfate (SM 4500 SO4 E)	210		100		mg/L			11/13/23 11:05	20

Definitions/Glossary

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241542-1

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: Will County CCR

Job ID: 500-241542-1

Metals

Prep Batch: 740389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241542-1	MW-05	Total Recoverable	Water	3005A	
500-241542-2	MW-06	Total Recoverable	Water	3005A	
500-241542-3	MW-09	Total Recoverable	Water	3005A	
500-241542-4	MW-10	Total Recoverable	Water	3005A	
500-241542-5	2S/3S Duplicate	Total Recoverable	Water	3005A	
MB 500-740389/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-740389/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 741658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241542-1	MW-05	Total Recoverable	Water	6020B	740389
500-241542-2	MW-06	Total Recoverable	Water	6020B	740389
500-241542-3	MW-09	Total Recoverable	Water	6020B	740389
500-241542-4	MW-10	Total Recoverable	Water	6020B	740389
500-241542-5	2S/3S Duplicate	Total Recoverable	Water	6020B	740389
MB 500-740389/1-A	Method Blank	Total Recoverable	Water	6020B	740389
LCS 500-740389/2-A	Lab Control Sample	Total Recoverable	Water	6020B	740389

Prep Batch: 741936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241542-1	MW-05	Total/NA	Water	7470A	
500-241542-2	MW-06	Total/NA	Water	7470A	
500-241542-3	MW-09	Total/NA	Water	7470A	
500-241542-4	MW-10	Total/NA	Water	7470A	
500-241542-5	2S/3S Duplicate	Total/NA	Water	7470A	
MB 500-741936/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-741936/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-241542-2 MS	MW-06	Total/NA	Water	7470A	
500-241542-2 MSD	MW-06	Total/NA	Water	7470A	
500-241542-2 DU	MW-06	Total/NA	Water	7470A	

Prep Batch: 742074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241542-1	MW-05	Total Recoverable	Water	3005A	
500-241542-2	MW-06	Total Recoverable	Water	3005A	
500-241542-3	MW-09	Total Recoverable	Water	3005A	
500-241542-4	MW-10	Total Recoverable	Water	3005A	
500-241542-5	2S/3S Duplicate	Total Recoverable	Water	3005A	
MB 500-742074/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-742074/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 742147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241542-1	MW-05	Total/NA	Water	7470A	741936
500-241542-2	MW-06	Total/NA	Water	7470A	741936
500-241542-3	MW-09	Total/NA	Water	7470A	741936
500-241542-4	MW-10	Total/NA	Water	7470A	741936
500-241542-5	2S/3S Duplicate	Total/NA	Water	7470A	741936
MB 500-741936/12-A	Method Blank	Total/NA	Water	7470A	741936
LCS 500-741936/13-A	Lab Control Sample	Total/NA	Water	7470A	741936
500-241542-2 MS	MW-06	Total/NA	Water	7470A	741936

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QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241542-1

Metals (Continued)

Analysis Batch: 742147 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241542-2 MSD	MW-06	Total/NA	Water	7470A	741936
500-241542-2 DU	MW-06	Total/NA	Water	7470A	741936

Analysis Batch: 742504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241542-1	MW-05	Total Recoverable	Water	6020B	742074
500-241542-2	MW-06	Total Recoverable	Water	6020B	742074
500-241542-3	MW-09	Total Recoverable	Water	6020B	742074
500-241542-4	MW-10	Total Recoverable	Water	6020B	742074
500-241542-5	2S/3S Duplicate	Total Recoverable	Water	6020B	742074
MB 500-742074/1-A	Method Blank	Total Recoverable	Water	6020B	742074
LCS 500-742074/2-A	Lab Control Sample	Total Recoverable	Water	6020B	742074

Prep Batch: 743405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241542-1	MW-05	Total Recoverable	Water	3005A	
500-241542-2	MW-06	Total Recoverable	Water	3005A	
500-241542-3	MW-09	Total Recoverable	Water	3005A	
500-241542-4	MW-10	Total Recoverable	Water	3005A	
500-241542-5	2S/3S Duplicate	Total Recoverable	Water	3005A	
MB 500-743405/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-743405/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 743808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241542-1	MW-05	Total Recoverable	Water	6020B	743405
500-241542-2	MW-06	Total Recoverable	Water	6020B	743405
500-241542-3	MW-09	Total Recoverable	Water	6020B	743405
500-241542-4	MW-10	Total Recoverable	Water	6020B	743405
500-241542-5	2S/3S Duplicate	Total Recoverable	Water	6020B	743405
MB 500-743405/1-A	Method Blank	Total Recoverable	Water	6020B	743405
LCS 500-743405/2-A	Lab Control Sample	Total Recoverable	Water	6020B	743405

General Chemistry

Analysis Batch: 738890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241542-1	MW-05	Total/NA	Water	SM 2540C	
500-241542-2	MW-06	Total/NA	Water	SM 2540C	
500-241542-3	MW-09	Total/NA	Water	SM 2540C	
500-241542-4	MW-10	Total/NA	Water	SM 2540C	
500-241542-5	2S/3S Duplicate	Total/NA	Water	SM 2540C	
MB 500-738890/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-738890/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 739652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241542-1	MW-05	Total/NA	Water	SM 4500 CI- E	
500-241542-2	MW-06	Total/NA	Water	SM 4500 CI- E	
500-241542-3	MW-09	Total/NA	Water	SM 4500 CI- E	
500-241542-4	MW-10	Total/NA	Water	SM 4500 CI- E	

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QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241542-1

General Chemistry (Continued)

Analysis Batch: 739652 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241542-5	2S/3S Duplicate	Total/NA	Water	SM 4500 Cl- E	
MB 500-739652/16	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 500-739652/61	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-739652/17	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 500-739652/62	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-241542-5 MS	2S/3S Duplicate	Total/NA	Water	SM 4500 Cl- E	
500-241542-5 MSD	2S/3S Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 741942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241542-1	MW-05	Total/NA	Water	SM 4500 F C	
500-241542-2	MW-06	Total/NA	Water	SM 4500 F C	
500-241542-3	MW-09	Total/NA	Water	SM 4500 F C	
500-241542-4	MW-10	Total/NA	Water	SM 4500 F C	
500-241542-5	2S/3S Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-741942/3	Method Blank	Total/NA	Water	SM 4500 F C	
MB 500-741942/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-741942/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCS 500-741942/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-241542-5 MS	2S/3S Duplicate	Total/NA	Water	SM 4500 F C	
500-241542-5 MSD	2S/3S Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 741949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241542-1	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-241542-2	MW-06	Total/NA	Water	SM 4500 SO4 E	
500-241542-3	MW-09	Total/NA	Water	SM 4500 SO4 E	
500-241542-4	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-241542-5	2S/3S Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-741949/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-741949/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

QC Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR

Job ID: 500-241542-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-740389/1-A
Matrix: Water
Analysis Batch: 741658

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 740389

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 02:16	1
Barium	<0.0025		0.0025		mg/L		11/03/23 09:16	11/10/23 02:16	1
Beryllium	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 02:16	1
Calcium	<0.20		0.20		mg/L		11/03/23 09:16	11/10/23 02:16	1
Cadmium	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 02:16	1
Cobalt	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 02:16	1
Chromium	<0.0050		0.0050		mg/L		11/03/23 09:16	11/10/23 02:16	1
Molybdenum	<0.0050		0.0050		mg/L		11/03/23 09:16	11/10/23 02:16	1
Lead	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 02:16	1
Antimony	<0.0030		0.0030		mg/L		11/03/23 09:16	11/10/23 02:16	1
Selenium	<0.0025		0.0025		mg/L		11/03/23 09:16	11/10/23 02:16	1
Thallium	<0.0020		0.0020		mg/L		11/03/23 09:16	11/10/23 02:16	1

Lab Sample ID: LCS 500-740389/2-A
Matrix: Water
Analysis Batch: 741658

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 740389

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.100	0.0937		mg/L		94	80 - 120
Barium	0.500	0.499		mg/L		100	80 - 120
Beryllium	0.0500	0.0449		mg/L		90	80 - 120
Calcium	10.0	9.84		mg/L		98	80 - 120
Cadmium	0.0500	0.0490		mg/L		98	80 - 120
Cobalt	0.500	0.475		mg/L		95	80 - 120
Chromium	0.200	0.192		mg/L		96	80 - 120
Molybdenum	1.00	0.926		mg/L		93	80 - 120
Lead	0.100	0.0981		mg/L		98	80 - 120
Antimony	0.500	0.489		mg/L		98	80 - 120
Selenium	0.100	0.0975		mg/L		97	80 - 120
Thallium	0.100	0.0995		mg/L		99	80 - 120

Lab Sample ID: MB 500-742074/1-A
Matrix: Water
Analysis Batch: 742504

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 742074

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		11/14/23 09:28	11/16/23 01:25	1

Lab Sample ID: LCS 500-742074/2-A
Matrix: Water
Analysis Batch: 742504

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 742074

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	0.100	0.105		mg/L		105	80 - 120

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241542-1

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

Lab Sample ID: MB 500-743405/1-A
Matrix: Water
Analysis Batch: 743808

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 743405

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		11/21/23 19:34	11/24/23 13:59	1

Lab Sample ID: LCS 500-743405/2-A
Matrix: Water
Analysis Batch: 743808

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 743405

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	0.892		mg/L		89	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-741936/12-A
Matrix: Water
Analysis Batch: 742147

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 741936

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/13/23 15:10	11/14/23 10:38	1

Lab Sample ID: LCS 500-741936/13-A
Matrix: Water
Analysis Batch: 742147

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 741936

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00201	0.00193		mg/L		96	80 - 120

Lab Sample ID: 500-241542-2 MS
Matrix: Water
Analysis Batch: 742147

Client Sample ID: MW-06
Prep Type: Total/NA
Prep Batch: 741936

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.00020		0.00100	0.000977		mg/L		98	75 - 125

Lab Sample ID: 500-241542-2 MSD
Matrix: Water
Analysis Batch: 742147

Client Sample ID: MW-06
Prep Type: Total/NA
Prep Batch: 741936

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.00020		0.00100	0.000992		mg/L		99	75 - 125	2	20

Lab Sample ID: 500-241542-2 DU
Matrix: Water
Analysis Batch: 742147

Client Sample ID: MW-06
Prep Type: Total/NA
Prep Batch: 741936

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	<0.00020		<0.00020		mg/L		NC	20

QC Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR

Job ID: 500-241542-1

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

Lab Sample ID: MB 500-738890/1
Matrix: Water
Analysis Batch: 738890

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			10/26/23 01:43	1

Lab Sample ID: LCS 500-738890/2
Matrix: Water
Analysis Batch: 738890

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	238		mg/L		95	80 - 120

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-739652/16
Matrix: Water
Analysis Batch: 739652

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			10/30/23 11:30	1

Lab Sample ID: MB 500-739652/61
Matrix: Water
Analysis Batch: 739652

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			10/30/23 14:09	1

Lab Sample ID: LCS 500-739652/17
Matrix: Water
Analysis Batch: 739652

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	20.2		mg/L		101	85 - 115

Lab Sample ID: LCS 500-739652/62
Matrix: Water
Analysis Batch: 739652

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	22.1		mg/L		111	85 - 115

Lab Sample ID: 500-241542-5 MS
Matrix: Water
Analysis Batch: 739652

Client Sample ID: 2S/3S Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	8.3		20.0	26.2		mg/L		89	75 - 125

QC Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR

Job ID: 500-241542-1

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

Lab Sample ID: 500-241542-5 MSD
 Matrix: Water
 Analysis Batch: 739652

Client Sample ID: 2S/3S Duplicate
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	8.3		20.0	26.3		mg/L		90	75 - 125	0	20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-741942/3
 Matrix: Water
 Analysis Batch: 741942

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			11/13/23 12:23	1

Lab Sample ID: MB 500-741942/31
 Matrix: Water
 Analysis Batch: 741942

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			11/13/23 14:37	1

Lab Sample ID: LCS 500-741942/32
 Matrix: Water
 Analysis Batch: 741942

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	9.60		mg/L		96	90 - 119

Lab Sample ID: LCS 500-741942/4
 Matrix: Water
 Analysis Batch: 741942

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	9.80		mg/L		98	90 - 119

Lab Sample ID: 500-241542-5 MS
 Matrix: Water
 Analysis Batch: 741942

Client Sample ID: 2S/3S Duplicate
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.49		5.00	5.14		mg/L		93	75 - 125

Lab Sample ID: 500-241542-5 MSD
 Matrix: Water
 Analysis Batch: 741942

Client Sample ID: 2S/3S Duplicate
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.49		5.00	5.22		mg/L		95	75 - 125	1	20

QC Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR

Job ID: 500-241542-1

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-741949/16
Matrix: Water
Analysis Batch: 741949

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			11/13/23 10:20	1

Lab Sample ID: LCS 500-741949/17
Matrix: Water
Analysis Batch: 741949

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	19.7		mg/L		98	88 - 123



Eurofins Chicago

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

Chain of Custody Record

NIKE 232

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Environ Tm

Client Information		Sampler <i>IAN HOWISON</i>		Lab PM Mockler, Diana J		Carrier Tracking No(s)		COC No 500-117186-45942 1									
Client Contact Patrick Allenstein		Phone <i>630 290 6850</i>		E Mail Diana.Mockler@et.eurofinsus.com		State of Origin		Page Page 1 of 1									
Company KPRG and Associates Inc		PWSID		Analysis Requested						Job # <i>500-241542</i>							
Address 14665 West Lisbon Road Suite 1A		Due Date Requested		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		903.0, 904.0		6010C, 6020A, 7470A		2540C, 4500_F_C, SM4500_Cl_E, SM4500_SO4_E		Total Number of Containers		Preservation Codes: 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)	
City Brookfield		TAT Requested (days)															
State Zip: WI, 53005		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No															
Phone 500-241542 COC		PO # 4502116506															
Email patricka@kprginc.com		WO #		Project # 50011609		Project Name: Will County 2S/3S Event Desc: Quarterly GW Monitoring		SSOW#		Site Illinois		Other:					
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Preservation Code		Special Instructions/Note					
<i>1 2 3 4 5</i>		<i>MW-05</i>		<i>10-24-23 09:19</i>		<i>G</i>		<i>Water</i>		<i>N N X X X</i>		<i>5</i>					
		<i>MW-06</i>		<i>10-24-23 10:29</i>		<i>G</i>		<i>Water</i>		<i>N N X X X</i>		<i>5</i>					
		<i>MW-09</i>		<i>10-24-23 13:00</i>		<i>G</i>		<i>Water</i>		<i>N W X X X</i>		<i>5</i>					
		<i>MW-10</i>		<i>10-24-23 11:38</i>		<i>G</i>		<i>Water</i>		<i>N W X X X</i>		<i>5</i>					
		<i>MW-11</i>		<i>—</i>		<i>—</i>		<i>Water</i>									
		<i>MW-12</i>		<i>—</i>		<i>—</i>		<i>Water</i>									
		<i>2S/3S Duplicate</i>		<i>10-24-23</i>		<i>G</i>		<i>Water</i>		<i>N N X X X</i>		<i>5</i>					
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>10-25-23 09:30</i>		<i>HPK</i>		<i>[Signature]</i>		<i>10/25/23 09:30</i>		<i>ETA</i>							
Relinquished by		Date/Time		Company		Received by		Date/Time		Company							
Relinquished by		Date/Time		Company		Received by		Date/Time		Company							
Custody Seals Intact		Custody Seal No		Cooler Temperature(s) °C and Other Remarks													
<input type="checkbox"/> Yes <input type="checkbox"/> No						<i>1.9-2.8, 4.5-4.3</i>											



Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-241542-1

Login Number: 241542

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	1.8,4.3
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	



Lab Chronicle

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR

Job ID: 500-241542-1

Client Sample ID: MW-05
Date Collected: 10/24/23 09:19
Date Received: 10/25/23 09:30

Lab Sample ID: 500-241542-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			740389	BDE	EET CHI	11/03/23 09:16 - 11/03/23 09:46 ¹
Total Recoverable	Analysis	6020B		1	741658	BJH	EET CHI	11/10/23 03:37
Total Recoverable	Prep	3005A			742074	BDE	EET CHI	11/14/23 09:28 - 11/14/23 09:58 ¹
Total Recoverable	Analysis	6020B		1	742504	BJH	EET CHI	11/16/23 02:58
Total Recoverable	Prep	3005A			743405	MC	EET CHI	11/21/23 19:34 - 11/22/23 00:34 ¹
Total Recoverable	Analysis	6020B		10	743808	BJH	EET CHI	11/24/23 14:57
Total/NA	Prep	7470A			741936	MJG	EET CHI	11/13/23 15:10 - 11/13/23 17:10 ¹
Total/NA	Analysis	7470A		1	742147	MJG	EET CHI	11/14/23 10:55
Total/NA	Analysis	SM 2540C		1	738890	CLB	EET CHI	10/26/23 02:32
Total/NA	Analysis	SM 4500 CI- E		1	739652	TR	EET CHI	10/30/23 14:10
Total/NA	Analysis	SM 4500 F C		1	741942	SO	EET CHI	11/13/23 14:28
Total/NA	Analysis	SM 4500 SO4 E		20	741949	TR	EET CHI	11/13/23 11:04

Client Sample ID: MW-06
Date Collected: 10/24/23 10:29
Date Received: 10/25/23 09:30

Lab Sample ID: 500-241542-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			740389	BDE	EET CHI	11/03/23 09:16 - 11/03/23 09:46 ¹
Total Recoverable	Analysis	6020B		1	741658	BJH	EET CHI	11/10/23 03:42
Total Recoverable	Prep	3005A			742074	BDE	EET CHI	11/14/23 09:28 - 11/14/23 09:58 ¹
Total Recoverable	Analysis	6020B		1	742504	BJH	EET CHI	11/16/23 03:01
Total Recoverable	Prep	3005A			743405	MC	EET CHI	11/21/23 19:34 - 11/22/23 00:34 ¹
Total Recoverable	Analysis	6020B		10	743808	BJH	EET CHI	11/24/23 15:01
Total/NA	Prep	7470A			741936	MJG	EET CHI	11/13/23 15:10 - 11/13/23 17:10 ¹
Total/NA	Analysis	7470A		1	742147	MJG	EET CHI	11/14/23 11:15
Total/NA	Analysis	SM 2540C		1	738890	CLB	EET CHI	10/26/23 02:34
Total/NA	Analysis	SM 4500 CI- E		1	739652	TR	EET CHI	10/30/23 11:31
Total/NA	Analysis	SM 4500 F C		1	741942	SO	EET CHI	11/13/23 14:32
Total/NA	Analysis	SM 4500 SO4 E		20	741949	TR	EET CHI	11/13/23 11:04

Client Sample ID: MW-09
Date Collected: 10/24/23 13:00
Date Received: 10/25/23 09:30

Lab Sample ID: 500-241542-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			740389	BDE	EET CHI	11/03/23 09:16 - 11/03/23 09:46 ¹
Total Recoverable	Analysis	6020B		1	741658	BJH	EET CHI	11/10/23 03:46
Total Recoverable	Prep	3005A			742074	BDE	EET CHI	11/14/23 09:28 - 11/14/23 09:58 ¹
Total Recoverable	Analysis	6020B		1	742504	BJH	EET CHI	11/16/23 03:05
Total Recoverable	Prep	3005A			743405	MC	EET CHI	11/21/23 19:34 - 11/22/23 00:34 ¹
Total Recoverable	Analysis	6020B		10	743808	BJH	EET CHI	11/24/23 15:05
Total/NA	Prep	7470A			741936	MJG	EET CHI	11/13/23 15:10 - 11/13/23 17:10 ¹
Total/NA	Analysis	7470A		1	742147	MJG	EET CHI	11/14/23 11:24

Eurofins Chicago

Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241542-1

Client Sample ID: MW-09

Date Collected: 10/24/23 13:00

Date Received: 10/25/23 09:30

Lab Sample ID: 500-241542-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	738890	CLB	EET CHI	10/26/23 02:37
Total/NA	Analysis	SM 4500 CI- E		20	739652	TR	EET CHI	10/30/23 12:36
Total/NA	Analysis	SM 4500 F C		1	741942	SO	EET CHI	11/13/23 14:47
Total/NA	Analysis	SM 4500 SO4 E		20	741949	TR	EET CHI	11/13/23 11:03

Client Sample ID: MW-10

Date Collected: 10/24/23 11:38

Date Received: 10/25/23 09:30

Lab Sample ID: 500-241542-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			740389	BDE	EET CHI	11/03/23 09:16 - 11/03/23 09:46 ¹
Total Recoverable	Analysis	6020B		1	741658	BJH	EET CHI	11/10/23 03:59
Total Recoverable	Prep	3005A			742074	BDE	EET CHI	11/14/23 09:28 - 11/14/23 09:58 ¹
Total Recoverable	Analysis	6020B		1	742504	BJH	EET CHI	11/16/23 03:08
Total Recoverable	Prep	3005A			743405	MC	EET CHI	11/21/23 19:34 - 11/22/23 00:34 ¹
Total Recoverable	Analysis	6020B		10	743808	BJH	EET CHI	11/24/23 15:08
Total/NA	Prep	7470A			741936	MJG	EET CHI	11/13/23 15:10 - 11/13/23 17:10 ¹
Total/NA	Analysis	7470A		1	742147	MJG	EET CHI	11/14/23 11:30
Total/NA	Analysis	SM 2540C		1	738890	CLB	EET CHI	10/26/23 02:39
Total/NA	Analysis	SM 4500 CI- E		20	739652	TR	EET CHI	10/30/23 12:36
Total/NA	Analysis	SM 4500 F C		1	741942	SO	EET CHI	11/13/23 15:16
Total/NA	Analysis	SM 4500 SO4 E		20	741949	TR	EET CHI	11/13/23 11:04

Client Sample ID: 2S/3S Duplicate

Date Collected: 10/24/23 00:00

Date Received: 10/25/23 09:30

Lab Sample ID: 500-241542-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			740389	BDE	EET CHI	11/03/23 09:16 - 11/03/23 09:46 ¹
Total Recoverable	Analysis	6020B		1	741658	BJH	EET CHI	11/10/23 04:03
Total Recoverable	Prep	3005A			742074	BDE	EET CHI	11/14/23 09:28 - 11/14/23 09:58 ¹
Total Recoverable	Analysis	6020B		1	742504	BJH	EET CHI	11/16/23 03:12
Total Recoverable	Prep	3005A			743405	MC	EET CHI	11/21/23 19:34 - 11/22/23 00:34 ¹
Total Recoverable	Analysis	6020B		10	743808	BJH	EET CHI	11/24/23 15:12
Total/NA	Prep	7470A			741936	MJG	EET CHI	11/13/23 15:10 - 11/13/23 17:10 ¹
Total/NA	Analysis	7470A		1	742147	MJG	EET CHI	11/14/23 11:32
Total/NA	Analysis	SM 2540C		1	738890	CLB	EET CHI	10/26/23 02:42
Total/NA	Analysis	SM 4500 CI- E		1	739652	TR	EET CHI	10/30/23 14:11
Total/NA	Analysis	SM 4500 F C		1	741942	SO	EET CHI	11/13/23 14:51
Total/NA	Analysis	SM 4500 SO4 E		20	741949	TR	EET CHI	11/13/23 11:05

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

Laboratory References:

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



ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/27/2023 9:09:35 AM

JOB DESCRIPTION

Will County CCR (RAD)

JOB NUMBER

500-241542-2

Eurofins Chicago

Job Notes

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Authorization



Generated
11/27/2023 9:09:35 AM

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Case Narrative

Client: Midwest Generation EME LLC
Project/Site: Will County CCR (RAD)

Job ID: 500-241542-2

Job ID: 500-241542-2

Laboratory: Eurofins Chicago

Narrative

**Job Narrative
500-241542-2**

Receipt

The samples were received on 10/25/23 09:30. 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 1.8° C and 4.3° C.

RAD

Method 904.0: Radium-228 batch 633892

The detection goal was not met for the sample duplicate. However the purpose of the DUP is to demonstrate batch precision. The precision was within control limits demonstrating no adverse effect from the discrepancy. (500-241542-E-1-B DU)

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: Will County CCR (RAD)

Job ID: 500-241542-2

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: Will County CCR (RAD)

Job ID: 500-241542-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-241542-1	MW-05	Water	10/24/23 09:19	10/25/23 09:30
500-241542-2	MW-06	Water	10/24/23 10:29	10/25/23 09:30
500-241542-3	MW-09	Water	10/24/23 13:00	10/25/23 09:30
500-241542-4	MW-10	Water	10/24/23 11:38	10/25/23 09:30
500-241542-5	2S/3S Duplicate	Water	10/24/23 00:00	10/25/23 09:30

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Client Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR (RAD)

Job ID: 500-241542-2

Client Sample ID: MW-05

Lab Sample ID: 500-241542-1

Date Collected: 10/24/23 09:19

Matrix: Water

Date Received: 10/25/23 09:30

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	0.100	U	0.0898	0.0902	1.00	0.139	pCi/L	10/27/23 10:35	11/20/23 14:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.5		30 - 110					10/27/23 10:35	11/20/23 14:39	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	0.0782	U	0.518	0.518	1.00	0.967	pCi/L	10/27/23 10:40	11/13/23 18:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.5		30 - 110					10/27/23 10:40	11/13/23 18:32	1
Y Carrier	84.5		30 - 110					10/27/23 10:40	11/13/23 18:32	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	0.178	U	0.526	0.526	5.00	0.967	pCi/L		11/21/23 13:27	1

Client Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR (RAD)

Job ID: 500-241542-2

Client Sample ID: MW-06

Lab Sample ID: 500-241542-2

Date Collected: 10/24/23 10:29

Matrix: Water

Date Received: 10/25/23 09:30

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	0.192		0.105	0.106	1.00	0.139	pCi/L	10/27/23 10:35	11/20/23 14:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.9		30 - 110					10/27/23 10:35	11/20/23 14:39	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	0.250	U	0.293	0.294	1.00	0.482	pCi/L	11/14/23 11:04	11/22/23 16:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.5		30 - 110					11/14/23 11:04	11/22/23 16:20	1
Y Carrier	88.2		30 - 110					11/14/23 11:04	11/22/23 16:20	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.442	U	0.311	0.313	5.00	0.482	pCi/L		11/22/23 21:51	1

Client Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR (RAD)

Job ID: 500-241542-2

Client Sample ID: MW-09

Lab Sample ID: 500-241542-3

Date Collected: 10/24/23 13:00

Matrix: Water

Date Received: 10/25/23 09:30

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	0.0865	U	0.0731	0.0735	1.00	0.108	pCi/L	10/27/23 10:35	11/20/23 19:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.2		30 - 110					10/27/23 10:35	11/20/23 19:09	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	0.0687	U	0.304	0.304	1.00	0.549	pCi/L	11/14/23 11:04	11/22/23 16:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		30 - 110					11/14/23 11:04	11/22/23 16:17	1
Y Carrier	81.9		30 - 110					11/14/23 11:04	11/22/23 16:17	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.155	U	0.313	0.313	5.00	0.549	pCi/L		11/22/23 21:51	1

Client Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR (RAD)

Job ID: 500-241542-2

Client Sample ID: MW-10

Lab Sample ID: 500-241542-4

Date Collected: 10/24/23 11:38

Matrix: Water

Date Received: 10/25/23 09:30

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	0.269		0.104	0.106	1.00	0.103	pCi/L	10/27/23 10:35	11/20/23 19:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		30 - 110					10/27/23 10:35	11/20/23 19:09	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	1.03		0.495	0.504	1.00	0.670	pCi/L	11/14/23 11:04	11/22/23 16:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		30 - 110					11/14/23 11:04	11/22/23 16:17	1
Y Carrier	84.9		30 - 110					11/14/23 11:04	11/22/23 16:17	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.30		0.506	0.515	5.00	0.670	pCi/L		11/22/23 21:51	1

Client Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR (RAD)

Job ID: 500-241542-2

Client Sample ID: 2S/3S Duplicate

Lab Sample ID: 500-241542-5

Date Collected: 10/24/23 00:00

Matrix: Water

Date Received: 10/25/23 09:30

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	0.253		0.101	0.104	1.00	0.105	pCi/L	10/27/23 10:35	11/20/23 19:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		30 - 110					10/27/23 10:35	11/20/23 19:09	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	0.157	U	0.301	0.301	1.00	0.520	pCi/L	11/14/23 11:04	11/22/23 16:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		30 - 110					11/14/23 11:04	11/22/23 16:17	1
Y Carrier	83.4		30 - 110					11/14/23 11:04	11/22/23 16:17	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.410	U	0.317	0.318	5.00	0.520	pCi/L		11/22/23 21:51	1

Definitions/Glossary

Client: Midwest Generation EME LLC
Project/Site: Will County CCR (RAD)

Job ID: 500-241542-2

Qualifiers

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
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: Will County CCR (RAD)

Job ID: 500-241542-2

Rad

Prep Batch: 633889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241542-1	MW-05	Total/NA	Water	PrecSep-21	
500-241542-2	MW-06	Total/NA	Water	PrecSep-21	
500-241542-3	MW-09	Total/NA	Water	PrecSep-21	
500-241542-4	MW-10	Total/NA	Water	PrecSep-21	
500-241542-5	2S/3S Duplicate	Total/NA	Water	PrecSep-21	
MB 160-633889/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-633889/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-241542-1 DU	MW-05	Total/NA	Water	PrecSep-21	

Prep Batch: 633892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241542-1	MW-05	Total/NA	Water	PrecSep_0	
500-241542-1 DU	MW-05	Total/NA	Water	PrecSep_0	

Prep Batch: 636830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241542-2	MW-06	Total/NA	Water	PrecSep_0	
500-241542-3	MW-09	Total/NA	Water	PrecSep_0	
500-241542-4	MW-10	Total/NA	Water	PrecSep_0	
500-241542-5	2S/3S Duplicate	Total/NA	Water	PrecSep_0	
MB 160-636830/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-636830/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Will County CCR (RAD)

Job ID: 500-241542-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-633889/1-A
Matrix: Water
Analysis Batch: 637571

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633889

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.01199	U	0.0475	0.0476	1.00	0.107	pCi/L	10/27/23 10:35	11/20/23 14:38	1
Carrier	MB	MB	Limits		Prepared	Analyzed	Dil Fac			
	%Yield	Qualifier								
Ba Carrier	96.2		30 - 110		10/27/23 10:35	11/20/23 14:38	1			

Lab Sample ID: LCS 160-633889/2-A
Matrix: Water
Analysis Batch: 637571

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633889

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	10.27		1.09	1.00	0.128	pCi/L	91	75 - 125
Carrier	LCS	LCS	Limits		Prepared	Analyzed	Dil Fac		
	%Yield	Qualifier							
Ba Carrier	98.2		30 - 110		10/27/23 10:35	11/20/23 14:38	1		

Lab Sample ID: 500-241542-1 DU
Matrix: Water
Analysis Batch: 637551

Client Sample ID: MW-05
Prep Type: Total/NA
Prep Batch: 633889

Analyte	Sample	Sample	DU	DU	Total	RL	MDC	Unit	RER	RER Limit
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					
Radium-226	0.100	U	0.02692	U	0.0659	1.00	0.121	pCi/L	0.47	1
Carrier	DU	DU	Limits		Prepared	Analyzed	Dil Fac			
	%Yield	Qualifier								
Ba Carrier	97.2		30 - 110		10/27/23 10:35	11/20/23 14:38	1			

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: 500-241542-1 DU
Matrix: Water
Analysis Batch: 636666

Client Sample ID: MW-05
Prep Type: Total/NA
Prep Batch: 633892

Analyte	Sample	Sample	DU	DU	Total	RL	MDC	Unit	RER	RER Limit
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					
Radium-228	0.0782	U	-0.3540	U G	0.539	1.00	1.11	pCi/L	0.41	1
Carrier	DU	DU	Limits		Prepared	Analyzed	Dil Fac			
	%Yield	Qualifier								
Ba Carrier	97.2		30 - 110		10/27/23 10:35	11/20/23 14:38	1			
Y Carrier	84.1		30 - 110		10/27/23 10:35	11/20/23 14:38	1			

QC Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR (RAD)

Job ID: 500-241542-2

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

Lab Sample ID: MB 160-636830/1-A
Matrix: Water
Analysis Batch: 637957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636830

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.2584	U	0.317	0.318	1.00	0.524	pCi/L	11/14/23 11:04	11/22/23 16:17	1
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed	Dil Fac
Ba Carrier	100		30 - 110				11/14/23 11:04		11/22/23 16:17	1
Y Carrier	80.4		30 - 110				11/14/23 11:04		11/22/23 16:17	1

Lab Sample ID: LCS 160-636830/2-A
Matrix: Water
Analysis Batch: 637957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636830

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	7.70	8.437		1.22	1.00	0.527	pCi/L	110	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	90.0		30 - 110						
Y Carrier	83.7		30 - 110						

Eurofins Chicago

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

Chain of Custody Record

NIKE 232

eurofins | **Environment**

Client Information Client Contact: Patrick Allenstein Company: KPRG and Associates Inc Address: 14665 West Lisbon Road Suite 1A, Brookfield, WI 53005 Phone: 500-241542 COC Email: patricka@kprginc.com			Sampler: <u>IAN HAWICSON</u> Lab PM: Mockler, Diana J E Mail: Diana Mockler@et eurofinsus.com			Carrier Tracking No(s) State of Origin Page 1 of 1			CCC No: 500-117186-45942 1 Job #: <u>500-241542</u>		
Project Name: Will County 2S/3S Event Desc: Quarterly GW Monitoring Site: Illinois				Project #: 50011609 SSOW#:				Analysis Requested Preservation Codes: 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)			
Sample Identification Sample Date Sample Time Sample Type Matrix (C=comp, G=grab) (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)			Due Date Requested TAT Requested (days) Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 4502116506 WO #:			Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 903.0, 904.0 6010C, 6020A, 7470A 2540C, 4500_F_C, SM4500_CL_E, SM4500_SO4_E			Total Number of containers		
MW-05 10-24-23 09:19 G Water			MW-06 10-24-23 10:29 G Water			MW-09 10-24-23 13:00 G Water			MW-10 10-24-23 11:38 G Water		
MW-11 - - - Water			MW-12 - - - Water			2S/3S Duplicate 10-24-23 - G Water			Special Instructions/Note		
Possible Hazard Identification <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						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <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: <u>[Signature]</u>				Date:		Time:		Method of Shipment:			
Relinquished by: <u>[Signature]</u>				Date/Time: 10-25-23 09:30		Company: <u>HPK</u>		Received by: <u>[Signature]</u>		Date/Time: 10/25/23 09:30	
Relinquished by:				Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:				Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No			Custody Seal No			Cooler Temperature(s) °C and Other Remarks: <u>1.9-21.8, 4.5-24.3</u>					



Chain of Custody Record



Environment Testing



Client Information (Sub Contract Lab)		Lab PM Mockler, Diana J	Carrier Tracking No(s) 500-180695.1
Client Contact Shipping/Receiving		E-Mail Diana.Mockler@et.eurofins.com	Page 1 of 1
Company TestAmerica Laboratories, Inc.		State of Origin Illinois	Job # 500-241542-2
Address 13715 Rider Trail North, City Earth City State, Zip MO, 63045		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - Trizma Y - EDTA Z - other (specify) Other:	
Phone 314-298-8566(Tel) 314-298-8757(Fax)		Accreditations Required (See note) NELAP - Illinois	
Email		Analysis Requested	
Project Name Will County CCR (RAD)		Total Number of Containers	
Site NRG Midwest Generation Will County		Field Filtered Sample (Yes or No)	
Due Date Requested: 11/14/2023		Perform MS/MSD (Yes or No)	
TAT Requested (days):		903.0/PrecSep_21 Standard Target List	
PO #		904.0/PrecSep_0 Standard Target List	
WO #		Ra226Ra228_GFPc	
Project # 50011609		Special Instructions/Note:	
SSOW#		Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume.	
Sample Date		Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume.	
Sample Time		Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume.	
Sample Type (C=Comp, G=grab)		Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume.	
Matrix (W=water, S=soil, O=water/soil, BT=Tissue, A=Air)		Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume.	
Preservation Code:		Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume.	
Sample ID (Lab ID)		Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume.	
MW-05 (500-241542-1)	10/24/23 09:19 Central	Water	3
MW-06 (500-241542-2)	10/24/23 10:29 Central	Water	3
MW-09 (500-241542-3)	10/24/23 13:00 Central	Water	3
MW-10 (500-241542-4)	10/24/23 11:38 Central	Water	3
2S/3S Duplicate (500-241542-5)	10/24/23 Central	Water	3

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.

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2
 Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: *Pravud* Date: 10/25/23 15:30
 Relinquished by: FED EX Date: _____
 Relinquished by: _____ Date: _____
 Custody Seals Intact: _____ Custody Seal No.: _____
 Δ Yes Δ No

Special Instructions/QC Requirements:
 Return To Client Disposal By Lab Archive For _____ Months
 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Received by: _____ Date/Time: _____ Company: _____
 Received by: *Suna Weothington* Date/Time: OCT 26 2023 08:40 Company: _____
 Received by: _____ Date/Time: _____ Company: _____
 Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-241542-2

Login Number: 241542

List Source: Eurofins Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.8,4.3
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: 500-241542-2

Login Number: 241542

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 10/26/23 02:22 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	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").	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: Will County CCR (RAD)

Job ID: 500-241542-2

Client Sample ID: MW-05

Date Collected: 10/24/23 09:19

Date Received: 10/25/23 09:30

Lab Sample ID: 500-241542-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			633889	KAC	EET SL	10/27/23 10:35
Total/NA	Analysis	903.0		1	637551	FLC	EET SL	11/20/23 14:39
Total/NA	Prep	PrecSep_0			633892	KAC	EET SL	10/27/23 10:40
Total/NA	Analysis	904.0		1	636666	SCB	EET SL	11/13/23 18:32
Total/NA	Analysis	Ra226_Ra228		1	637752	SCB	EET SL	11/21/23 13:27

Client Sample ID: MW-06

Date Collected: 10/24/23 10:29

Date Received: 10/25/23 09:30

Lab Sample ID: 500-241542-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			633889	KAC	EET SL	10/27/23 10:35
Total/NA	Analysis	903.0		1	637551	FLC	EET SL	11/20/23 14:39
Total/NA	Prep	PrecSep_0			636830	KAC	EET SL	11/14/23 11:04
Total/NA	Analysis	904.0		1	637957	SCB	EET SL	11/22/23 16:20
Total/NA	Analysis	Ra226_Ra228		1	638008	EMH	EET SL	11/22/23 21:51

Client Sample ID: MW-09

Date Collected: 10/24/23 13:00

Date Received: 10/25/23 09:30

Lab Sample ID: 500-241542-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			633889	KAC	EET SL	10/27/23 10:35
Total/NA	Analysis	903.0		1	637570	FLC	EET SL	11/20/23 19:09
Total/NA	Prep	PrecSep_0			636830	KAC	EET SL	11/14/23 11:04
Total/NA	Analysis	904.0		1	637959	SCB	EET SL	11/22/23 16:17
Total/NA	Analysis	Ra226_Ra228		1	638008	EMH	EET SL	11/22/23 21:51

Client Sample ID: MW-10

Date Collected: 10/24/23 11:38

Date Received: 10/25/23 09:30

Lab Sample ID: 500-241542-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			633889	KAC	EET SL	10/27/23 10:35
Total/NA	Analysis	903.0		1	637570	FLC	EET SL	11/20/23 19:09
Total/NA	Prep	PrecSep_0			636830	KAC	EET SL	11/14/23 11:04
Total/NA	Analysis	904.0		1	637959	SCB	EET SL	11/22/23 16:17
Total/NA	Analysis	Ra226_Ra228		1	638008	EMH	EET SL	11/22/23 21:51

Lab Chronicle

Client: Midwest Generation EME LLC
Project/Site: Will County CCR (RAD)

Job ID: 500-241542-2

Client Sample ID: 2S/3S Duplicate

Lab Sample ID: 500-241542-5

Date Collected: 10/24/23 00:00

Matrix: Water

Date Received: 10/25/23 09:30

<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			633889	KAC	EET SL	10/27/23 10:35
Total/NA	Analysis	903.0		1	637570	FLC	EET SL	11/20/23 19:09
Total/NA	Prep	PrecSep_0			636830	KAC	EET SL	11/14/23 11:04
Total/NA	Analysis	904.0		1	637959	SCB	EET SL	11/22/23 16:17
Total/NA	Analysis	Ra226_Ra228		1	638008	EMH	EET SL	11/22/23 21:51

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: Will County CCR (RAD)

Job ID: 500-241542-2

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)
500-241542-1	MW-05	94.5
500-241542-1 DU	MW-05	97.2
500-241542-2	MW-06	89.9
500-241542-3	MW-09	92.2
500-241542-4	MW-10	93.2
500-241542-5	2S/3S Duplicate	94.0
LCS 160-633889/2-A	Lab Control Sample	98.2
MB 160-633889/1-A	Method Blank	96.2

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)
500-241542-1	MW-05	94.5	84.5
500-241542-1 DU	MW-05	97.2	84.1
500-241542-2	MW-06	99.5	88.2
500-241542-3	MW-09	97.9	81.9
500-241542-4	MW-10	99.7	84.9
500-241542-5	2S/3S Duplicate	104	83.4
LCS 160-636830/2-A	Lab Control Sample	90.0	83.7
MB 160-636830/1-A	Method Blank	100	80.4

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier



ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/14/2023 11:28:50 AM

JOB DESCRIPTION

Will County CCR

JOB NUMBER

500-241311-1

Eurofins Chicago

Job Notes

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

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Case Narrative

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241311-1

Job ID: 500-241311-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-241311-1

Receipt

The samples were received on 10/19/2023 4:30 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.6° C and 4.3° C.

Receipt Exceptions

A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC). Added to COC and logged in without any analysis.

Metals

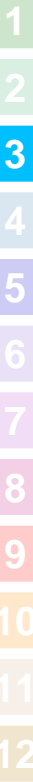
Method 6020B: The initial calibration verification (ICV) result for batch 739840 was above the 90-110% upper control limit for Tl (111%). Sample results were below the reporting limit and have been reported as qualified data.

Method 6020B: The continuing calibration verification (CCV) associated with batch 740085 and the LCS for prep batch 738371 recovered above the upper control limit for Be. The samples associated with this CCV and LCS were non-detects for the affected analytes; therefore, the data have been reported.

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.



Method Summary

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241311-1

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: Will County CCR

Job ID: 500-241311-1

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
500-241311-1	MW-11	Water	10/19/23 11:16	10/19/23 16:30
500-241311-2	MW-12	Water	10/19/23 12:00	10/19/23 16:30

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Client Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR

Job ID: 500-241311-1

Client Sample ID: MW-11
Date Collected: 10/19/23 11:16
Date Received: 10/19/23 16:30

Lab Sample ID: 500-241311-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.010		0.0010		mg/L		10/23/23 08:58	10/31/23 16:23	1
Boron	3.0		0.050		mg/L		10/23/23 08:58	11/02/23 22:16	1
Barium	0.16		0.0025		mg/L		10/23/23 08:58	10/31/23 16:23	1
Beryllium	<0.0010	*+ ^+	0.0010		mg/L		10/23/23 08:58	11/02/23 05:21	1
Calcium	120		0.20		mg/L		10/23/23 08:58	10/31/23 16:23	1
Cadmium	<0.00050		0.00050		mg/L		10/23/23 08:58	10/31/23 16:23	1
Cobalt	<0.0010		0.0010		mg/L		10/23/23 08:58	10/31/23 16:23	1
Chromium	<0.0050		0.0050		mg/L		10/23/23 08:58	10/31/23 16:23	1
Molybdenum	0.044		0.0050		mg/L		10/23/23 08:58	10/31/23 16:23	1
Lead	<0.00050		0.00050		mg/L		10/23/23 08:58	10/31/23 16:23	1
Antimony	<0.0030		0.0030		mg/L		10/23/23 08:58	10/31/23 16:23	1
Selenium	<0.0025		0.0025		mg/L		10/23/23 08:58	10/31/23 16:23	1
Thallium	<0.0020	^1+	0.0020		mg/L		10/23/23 08:58	10/31/23 16:23	1
Lithium	<0.010		0.010		mg/L		11/09/23 19:29	11/13/23 17:24	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		10/26/23 11:10	11/01/23 11:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	770		10		mg/L			10/23/23 19:43	1
Chloride (SM 4500 Cl- E)	120		20		mg/L			10/25/23 14:51	10
Fluoride (SM 4500 F C)	0.55		0.10		mg/L			11/02/23 12:33	1
Sulfate (SM 4500 SO4 E)	74		50		mg/L			10/24/23 11:01	10

Client Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR

Job ID: 500-241311-1

Client Sample ID: MW-12
Date Collected: 10/19/23 12:00
Date Received: 10/19/23 16:30

Lab Sample ID: 500-241311-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0013		0.0010		mg/L		10/23/23 08:58	10/31/23 16:26	1
Boron	2.2		0.050		mg/L		10/23/23 08:58	11/02/23 22:20	1
Barium	0.18		0.0025		mg/L		10/23/23 08:58	10/31/23 16:26	1
Beryllium	<0.0010	*+ ^+	0.0010		mg/L		10/23/23 08:58	11/02/23 05:24	1
Calcium	180		0.20		mg/L		10/23/23 08:58	10/31/23 16:26	1
Cadmium	<0.00050		0.00050		mg/L		10/23/23 08:58	10/31/23 16:26	1
Cobalt	<0.0010		0.0010		mg/L		10/23/23 08:58	10/31/23 16:26	1
Chromium	<0.0050		0.0050		mg/L		10/23/23 08:58	10/31/23 16:26	1
Molybdenum	0.027		0.0050		mg/L		10/23/23 08:58	10/31/23 16:26	1
Lead	<0.00050		0.00050		mg/L		10/23/23 08:58	10/31/23 16:26	1
Antimony	<0.0030		0.0030		mg/L		10/23/23 08:58	10/31/23 16:26	1
Selenium	0.0040		0.0025		mg/L		10/23/23 08:58	10/31/23 16:26	1
Thallium	<0.0020	^1+	0.0020		mg/L		10/23/23 08:58	10/31/23 16:26	1
Lithium	0.014		0.010		mg/L		11/09/23 19:29	11/13/23 17:27	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		10/26/23 11:10	11/01/23 11:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1100		10		mg/L			10/23/23 19:46	1
Chloride (SM 4500 Cl- E)	180		40		mg/L			10/25/23 14:52	20
Fluoride (SM 4500 F C)	0.47		0.10		mg/L			11/02/23 12:37	1
Sulfate (SM 4500 SO4 E)	170		100		mg/L			10/24/23 10:57	20

Definitions/Glossary

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241311-1

Qualifiers

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^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: Will County CCR

Job ID: 500-241311-1

Metals

Prep Batch: 738371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241311-1	MW-11	Total Recoverable	Water	3005A	
500-241311-2	MW-12	Total Recoverable	Water	3005A	
MB 500-738371/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-738371/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 738961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241311-1	MW-11	Total/NA	Water	7470A	
500-241311-2	MW-12	Total/NA	Water	7470A	
MB 500-738961/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-738961/13-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 739840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241311-1	MW-11	Total Recoverable	Water	6020B	738371
500-241311-2	MW-12	Total Recoverable	Water	6020B	738371
MB 500-738371/1-A	Method Blank	Total Recoverable	Water	6020B	738371
LCS 500-738371/2-A	Lab Control Sample	Total Recoverable	Water	6020B	738371

Analysis Batch: 739992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241311-1	MW-11	Total/NA	Water	7470A	738961
500-241311-2	MW-12	Total/NA	Water	7470A	738961
MB 500-738961/12-A	Method Blank	Total/NA	Water	7470A	738961
LCS 500-738961/13-A	Lab Control Sample	Total/NA	Water	7470A	738961

Analysis Batch: 740085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241311-1	MW-11	Total Recoverable	Water	6020B	738371
500-241311-2	MW-12	Total Recoverable	Water	6020B	738371
MB 500-738371/1-A	Method Blank	Total Recoverable	Water	6020B	738371
LCS 500-738371/2-A	Lab Control Sample	Total Recoverable	Water	6020B	738371

Analysis Batch: 740421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241311-1	MW-11	Total Recoverable	Water	6020B	738371
500-241311-2	MW-12	Total Recoverable	Water	6020B	738371
MB 500-738371/1-A	Method Blank	Total Recoverable	Water	6020B	738371
LCS 500-738371/2-A	Lab Control Sample	Total Recoverable	Water	6020B	738371

Prep Batch: 741523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241311-1	MW-11	Total Recoverable	Water	3005A	
500-241311-2	MW-12	Total Recoverable	Water	3005A	
MB 500-741523/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-741523/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 742038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241311-1	MW-11	Total Recoverable	Water	6020B	741523
500-241311-2	MW-12	Total Recoverable	Water	6020B	741523

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QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241311-1

Metals (Continued)

Analysis Batch: 742038 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-741523/1-A	Method Blank	Total Recoverable	Water	6020B	741523
LCS 500-741523/2-A	Lab Control Sample	Total Recoverable	Water	6020B	741523

General Chemistry

Analysis Batch: 738473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241311-1	MW-11	Total/NA	Water	SM 2540C	
500-241311-2	MW-12	Total/NA	Water	SM 2540C	
MB 500-738473/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-738473/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 738638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241311-1	MW-11	Total/NA	Water	SM 4500 SO4 E	
500-241311-2	MW-12	Total/NA	Water	SM 4500 SO4 E	
MB 500-738638/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-738638/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 738855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241311-1	MW-11	Total/NA	Water	SM 4500 CI- E	
500-241311-2	MW-12	Total/NA	Water	SM 4500 CI- E	
MB 500-738855/106	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-738855/107	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 740227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241311-1	MW-11	Total/NA	Water	SM 4500 F C	
500-241311-2	MW-12	Total/NA	Water	SM 4500 F C	
MB 500-740227/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-740227/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-241311-2 MS	MW-12	Total/NA	Water	SM 4500 F C	
500-241311-2 MSD	MW-12	Total/NA	Water	SM 4500 F C	

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241311-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-738371/1-A
Matrix: Water
Analysis Batch: 739840

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 738371

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.0010		0.0010		mg/L		10/23/23 08:58	10/31/23 14:30	1
Barium	<0.0025		0.0025		mg/L		10/23/23 08:58	10/31/23 14:30	1
Calcium	<0.20		0.20		mg/L		10/23/23 08:58	10/31/23 14:30	1
Cadmium	<0.00050		0.00050		mg/L		10/23/23 08:58	10/31/23 14:30	1
Cobalt	<0.0010		0.0010		mg/L		10/23/23 08:58	10/31/23 14:30	1
Chromium	<0.0050		0.0050		mg/L		10/23/23 08:58	10/31/23 14:30	1
Molybdenum	<0.0050		0.0050		mg/L		10/23/23 08:58	10/31/23 14:30	1
Lead	<0.00050		0.00050		mg/L		10/23/23 08:58	10/31/23 14:30	1
Antimony	<0.0030		0.0030		mg/L		10/23/23 08:58	10/31/23 14:30	1
Selenium	<0.0025		0.0025		mg/L		10/23/23 08:58	10/31/23 14:30	1
Thallium	<0.0020	^1+	0.0020		mg/L		10/23/23 08:58	10/31/23 14:30	1

Lab Sample ID: MB 500-738371/1-A
Matrix: Water
Analysis Batch: 740085

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 738371

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Beryllium	<0.0010	^+	0.0010		mg/L		10/23/23 08:58	11/02/23 05:14	1

Lab Sample ID: MB 500-738371/1-A
Matrix: Water
Analysis Batch: 740421

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 738371

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Boron	<0.050		0.050		mg/L		10/23/23 08:58	11/02/23 22:08	1

Lab Sample ID: LCS 500-738371/2-A
Matrix: Water
Analysis Batch: 739840

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 738371

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Arsenic	0.100	0.107		mg/L		107	80 - 120
Barium	0.500	0.541		mg/L		108	80 - 120
Calcium	10.0	8.61		mg/L		86	80 - 120
Cadmium	0.0500	0.0525		mg/L		105	80 - 120
Cobalt	0.500	0.510		mg/L		102	80 - 120
Chromium	0.200	0.203		mg/L		102	80 - 120
Molybdenum	1.00	1.03		mg/L		103	80 - 120
Lead	0.100	0.110		mg/L		110	80 - 120
Antimony	0.500	0.526		mg/L		105	80 - 120
Selenium	0.100	0.114		mg/L		114	80 - 120
Thallium	0.100	0.111	^1+	mg/L		111	80 - 120

Lab Sample ID: LCS 500-738371/2-A
Matrix: Water
Analysis Batch: 740085

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 738371

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Beryllium	0.0500	0.0704	*+ ^+	mg/L		141	80 - 120

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QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241311-1

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

Lab Sample ID: LCS 500-738371/2-A
Matrix: Water
Analysis Batch: 740421

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 738371

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.03		mg/L		103	80 - 120

Lab Sample ID: MB 500-741523/1-A
Matrix: Water
Analysis Batch: 742038

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 741523

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		11/09/23 19:29	11/13/23 17:16	1

Lab Sample ID: LCS 500-741523/2-A
Matrix: Water
Analysis Batch: 742038

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 741523

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	0.100	0.0962		mg/L		96	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-738961/12-A
Matrix: Water
Analysis Batch: 739992

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 738961

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		10/26/23 11:10	11/01/23 10:55	1

Lab Sample ID: LCS 500-738961/13-A
Matrix: Water
Analysis Batch: 739992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 738961

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00201	0.00200		mg/L		100	80 - 120

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

Lab Sample ID: MB 500-738473/1
Matrix: Water
Analysis Batch: 738473

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			10/23/23 19:23	1

Lab Sample ID: LCS 500-738473/2
Matrix: Water
Analysis Batch: 738473

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	266		mg/L		106	80 - 120

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QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241311-1

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-738855/106
Matrix: Water
Analysis Batch: 738855

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			10/25/23 14:24	1

Lab Sample ID: LCS 500-738855/107
Matrix: Water
Analysis Batch: 738855

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

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

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-740227/31
Matrix: Water
Analysis Batch: 740227

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			11/02/23 12:23	1

Lab Sample ID: LCS 500-740227/32
Matrix: Water
Analysis Batch: 740227

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	10.0		mg/L		100	90 - 119

Lab Sample ID: 500-241311-2 MS
Matrix: Water
Analysis Batch: 740227

Client Sample ID: MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.47		5.00	5.38		mg/L		98	75 - 125

Lab Sample ID: 500-241311-2 MSD
Matrix: Water
Analysis Batch: 740227

Client Sample ID: MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.47		5.00	5.36		mg/L		98	75 - 125	0	20

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-738638/16
Matrix: Water
Analysis Batch: 738638

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			10/24/23 10:54	1

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241311-1

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

Lab Sample ID: LCS 500-738638/17
Matrix: Water
Analysis Batch: 738638

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	19.9		mg/L		99	88 - 123

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Eurofins Chicago
 2417 Bond Street
 University Park, IL 60484
 Phone 708-534-5200 Fax 708-534-5241

Chain of Custody Record

NIKE 232

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Client Information			Sampler: <u>Ian John Morrison</u>		Lab PM: Mockler, Diana J		Carrier Tracking No(s)		COC No: 500-117106-45042.1		
Client Contact: Patrick Allenstein			Phone: <u>630 290 6850</u>		E-Mail: Diana Mockler@et.eurofins.com		State of Origin		Page: Page 1 of 1		
Company: KPRG and Associates, Inc.			PWSID		Analysis Requested: <u>500-241311</u>						
Address: 14885 West Lisbon Road, Suite 1A			Due Date Requested		Preservation Codes: A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NitH2SO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J Oil Water V MCAA K EDTA W pH 4-5 L EDA Y Tizma Z other (specify)						
City: Brookfield			TAT Requested (days)								
State, Zip: WI, 53005			Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No								
Phone: 500-241311 COC			PO #: 4602110506								
Email: patricka@kprginc.com			WO#:								
Project Name: Will County 2S/3S Event Desc: Quarterly GW Monitoring			Project #: 50011609 <u>CCR</u>								
Site Illinois			SSOW#:		Diluent: 904.0 904.0 601AC, 602DA, 7470A 2540C, 4500_F_C, 5162500_C1E, 5164500_SO4_E						
Sample Identification			Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=oil, OT=Other, A=Air)	Special Instructions/Note:				
MW-05			---	---	---	Water					
MW-06			---	---	---	Water					
MW-09			---	---	---	Water					
MW-10			---	---	---	Water					
MW-11			10-19-23	11:16	G	Water	N	N	X	X	
MW-12			10-19-23	12:00	G	Water	N	N	X	X	
2S/3S Duplicate			---	---	---	Water					
3 rd Trip Blank			---	---	---	Water	Added by EETA				
10/20/23											

2 10/20/23
 3 10/20/23

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: <u>[Signature]</u>		Date/Time: 10-19-23 16:30		Company: KPRG		Received by: <u>[Signature]</u>	
Relinquished by:		Date/Time:		Company:		Received by:	
Relinquished by:		Date/Time:		Company:		Received by:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: <u>4.5 → 4.3, 3.8 → 3.6</u>			

Ver 06/08/2021



Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-241311-1

Login Number: 241311

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	4.3,3.6
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.	False	
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: Will County CCR

Job ID: 500-241311-1

Client Sample ID: MW-11
Date Collected: 10/19/23 11:16
Date Received: 10/19/23 16:30

Lab Sample ID: 500-241311-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			738371	BDE	EET CHI	10/23/23 08:58 - 10/23/23 09:28 ¹
Total Recoverable	Analysis	6020B		1	740085	BJH	EET CHI	11/02/23 05:21
Total Recoverable	Prep	3005A			738371	BDE	EET CHI	10/23/23 08:58 - 10/23/23 09:28 ¹
Total Recoverable	Analysis	6020B		1	740421	BJH	EET CHI	11/02/23 22:16
Total Recoverable	Prep	3005A			741523	MC	EET CHI	11/09/23 19:29 - 11/10/23 00:29 ¹
Total Recoverable	Analysis	6020B		1	742038	BJH	EET CHI	11/13/23 17:24
Total Recoverable	Prep	3005A			738371	BDE	EET CHI	10/23/23 08:58 - 10/23/23 09:28 ¹
Total Recoverable	Analysis	6020B		1	739840	BJH	EET CHI	10/31/23 16:23
Total/NA	Prep	7470A			738961	SS	EET CHI	10/26/23 11:10 - 10/26/23 13:10 ¹
Total/NA	Analysis	7470A		1	739992	MJG	EET CHI	11/01/23 11:51
Total/NA	Analysis	SM 2540C		1	738473	CLB	EET CHI	10/23/23 19:43
Total/NA	Analysis	SM 4500 CI- E		10	738855	TR	EET CHI	10/25/23 14:51
Total/NA	Analysis	SM 4500 F C		1	740227	SO	EET CHI	11/02/23 12:33
Total/NA	Analysis	SM 4500 SO4 E		10	738638	TR	EET CHI	10/24/23 11:01

Client Sample ID: MW-12
Date Collected: 10/19/23 12:00
Date Received: 10/19/23 16:30

Lab Sample ID: 500-241311-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			738371	BDE	EET CHI	10/23/23 08:58 - 10/23/23 09:28 ¹
Total Recoverable	Analysis	6020B		1	740085	BJH	EET CHI	11/02/23 05:24
Total Recoverable	Prep	3005A			738371	BDE	EET CHI	10/23/23 08:58 - 10/23/23 09:28 ¹
Total Recoverable	Analysis	6020B		1	740421	BJH	EET CHI	11/02/23 22:20
Total Recoverable	Prep	3005A			741523	MC	EET CHI	11/09/23 19:29 - 11/10/23 00:29 ¹
Total Recoverable	Analysis	6020B		1	742038	BJH	EET CHI	11/13/23 17:27
Total Recoverable	Prep	3005A			738371	BDE	EET CHI	10/23/23 08:58 - 10/23/23 09:28 ¹
Total Recoverable	Analysis	6020B		1	739840	BJH	EET CHI	10/31/23 16:26
Total/NA	Prep	7470A			738961	SS	EET CHI	10/26/23 11:10 - 10/26/23 13:10 ¹
Total/NA	Analysis	7470A		1	739992	MJG	EET CHI	11/01/23 11:53
Total/NA	Analysis	SM 2540C		1	738473	CLB	EET CHI	10/23/23 19:46
Total/NA	Analysis	SM 4500 CI- E		20	738855	TR	EET CHI	10/25/23 14:52
Total/NA	Analysis	SM 4500 F C		1	740227	SO	EET CHI	11/02/23 12:37
Total/NA	Analysis	SM 4500 SO4 E		20	738638	TR	EET CHI	10/24/23 10:57

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

Laboratory References:

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



ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/27/2023 3:03:51 PM

JOB DESCRIPTION

Will County CCR

JOB NUMBER

500-241311-2

Eurofins Chicago

Job Notes

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

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

Authorization



Generated
11/27/2023 3:03:51 PM

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

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Case Narrative

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241311-2

Job ID: 500-241311-2

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-241311-2

Receipt

The samples were received on 10/19/2023 4:30 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.6° C and 4.3° C.

RAD

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

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Method Summary

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241311-2

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: Will County CCR

Job ID: 500-241311-2

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
500-241311-1	MW-11	Water	10/19/23 11:16	10/19/23 16:30
500-241311-2	MW-12	Water	10/19/23 12:00	10/19/23 16:30

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Client Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR

Job ID: 500-241311-2

Client Sample ID: MW-11
Date Collected: 10/19/23 11:16
Date Received: 10/19/23 16:30

Lab Sample ID: 500-241311-1
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	0.382		0.151	0.155	1.00	0.162	pCi/L	10/26/23 10:30	11/22/23 19:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.2		30 - 110					10/26/23 10:30	11/22/23 19:24	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	0.953		0.537	0.544	1.00	0.761	pCi/L	10/26/23 10:34	11/16/23 12:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.2		30 - 110					10/26/23 10:34	11/16/23 12:22	1
Y Carrier	77.8		30 - 110					10/26/23 10:34	11/16/23 12:22	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.34		0.558	0.566	5.00	0.761	pCi/L		11/27/23 13:44	1

Client Sample Results

Client: Midwest Generation EME LLC
 Project/Site: Will County CCR

Job ID: 500-241311-2

Client Sample ID: MW-12
Date Collected: 10/19/23 12:00
Date Received: 10/19/23 16:30

Lab Sample ID: 500-241311-2
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	0.281		0.112	0.115	1.00	0.126	pCi/L	10/26/23 10:30	11/22/23 19:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.9		30 - 110					10/26/23 10:30	11/22/23 19:24	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	0.608		0.400	0.404	1.00	0.589	pCi/L	10/26/23 10:34	11/16/23 12:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.9		30 - 110					10/26/23 10:34	11/16/23 12:23	1
Y Carrier	78.9		30 - 110					10/26/23 10:34	11/16/23 12:23	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	0.889		0.415	0.420	5.00	0.589	pCi/L		11/27/23 13:44	1

Definitions/Glossary

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241311-2

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: Will County CCR

Job ID: 500-241311-2

Rad

Prep Batch: 633683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241311-1	MW-11	Total/NA	Water	PrecSep-21	
500-241311-2	MW-12	Total/NA	Water	PrecSep-21	
MB 160-633683/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-633683/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 633684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241311-1	MW-11	Total/NA	Water	PrecSep_0	
500-241311-2	MW-12	Total/NA	Water	PrecSep_0	
MB 160-633684/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-633684/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	



QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Will County CCR

Job ID: 500-241311-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-633683/1-A
Matrix: Water
Analysis Batch: 637801

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633683

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.04153	U	0.0593	0.0594	1.00	0.101	pCi/L	10/26/23 10:30	11/22/23 12:23	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
%Yield	Qualifier									
Ba Carrier	94.5		30 - 110			10/26/23 10:30	11/22/23 12:23	1		

Lab Sample ID: LCS 160-633683/2-A
Matrix: Water
Analysis Batch: 637801

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633683

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	10.81		1.14	1.00	0.112	pCi/L	95	75 - 125
Carrier	LCS LCS		Limits			Prepared	Analyzed	Dil Fac	
%Yield	Qualifier								
Ba Carrier	95.5		30 - 110						

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-633684/1-A
Matrix: Water
Analysis Batch: 637108

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633684

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.4403	U	0.345	0.347	1.00	0.529	pCi/L	10/26/23 10:34	11/16/23 12:10	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
%Yield	Qualifier									
Ba Carrier	94.5		30 - 110			10/26/23 10:34	11/16/23 12:10	1		
Y Carrier	80.7		30 - 110			10/26/23 10:34	11/16/23 12:10	1		

Lab Sample ID: LCS 160-633684/2-A
Matrix: Water
Analysis Batch: 637108

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633684

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	7.72	8.703		1.24	1.00	0.542	pCi/L	113	75 - 125
Carrier	LCS LCS		Limits			Prepared	Analyzed	Dil Fac	
%Yield	Qualifier								
Ba Carrier	95.5		30 - 110						
Y Carrier	78.1		30 - 110						

Eurofins Chicago

2417 Bond Street
University Park, IL 60484
Phone 708-534-5200 Fax 708-534-5244

Chain of Custody Record

NIKE 232

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Client Information		Sampler: <u>IAN JOHN HENNINGSEN</u>		Lab PM: <u>Mockler, Diana J</u>		Carrier Tracking No(s)		COC No: <u>500-117106-45942 1</u>			
Client Contact: <u>Patrick Allenstein</u>		Phone: <u>630 290 6850</u>		E-Mail: <u>Diana.Mockler@et.eurofinsus.com</u>		State of Origin		Page: <u>Page 1 of 1</u>			
Company: <u>KPRG and Associates, Inc.</u>		PWSID:		Analysis Requested		Job #:		<u>500-241311</u>			
Address: <u>14885 West Lisbon Road, Suite 1A</u>		Due Date Requested:		9000, 9040 8010C, 8020A, 7470A 2540C, 4500, F, C, S, 60500, C, E, S, 14500, S, O, A, E		Preservation Codes		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 Oil Water V MCAA K EDTA W pH 4-5 L EDA Y Tizma Z other (specify)			
City: <u>Brookfield</u>		TAT Requested (days)				Dilution		Dilution		Dilution	
State, Zip: <u>WI, 53005</u>		Compliance Project: <u>Δ Yes Δ No</u>				PO #:		Dilution		Dilution	
Phone: <u>500-241311 COC</u>		WO #:				Project #:		Dilution		Dilution	
Email: <u>patricka@kprginc.com</u>		SSOW#:				SSOW#:		Dilution		Dilution	
Project Name: <u>Will County 2S/3S Event Desc: Quarterly GW Monitoring</u>		Project #:		Project #:		Dilution		Dilution			
Site: <u>Illinois</u>		SSOW#:		SSOW#:		Dilution		Dilution			
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=other, AT=Air, A=As)			
MW-05		---		---		---		Water			
MW-06		---		---		---		Water			
MW-09		---		---		---		Water			
MW-10		---		---		---		Water			
MW-11		10-19-23		11:16		G		Water			
MW-12		10-19-23		12:00		G		Water			
2S/3S Duplicate		---		---		---		Water			
3 Trip Blank		---		---		---		Water			
10/20/23		---		---		---		Water			
Possible Hazard Identification		<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		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/Note:			
Deliverable Requested I, II, III, IV, Other (specify)		Special Instructions/QC Requirements		Special Instructions/Note:		Special Instructions/Note:		Special Instructions/Note:			
Empty Kit Relinquished by:		Date		Time		Method of Shipment		Special Instructions/Note:			
Relinquished by: <u>[Signature]</u>		Date/Time: <u>10-19-23 16:30</u>		Company: <u>KPRG</u>		Received by: <u>Ramona</u>		Date/Time: <u>10/19/23 16:30</u>			
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:			
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:			
Custody Seals Intact: <u>Δ Yes Δ No</u>		Custody Seal No		Cooler Temperature(s) °C and Other Remarks:		Cooler Temperature(s) °C and Other Remarks:		Cooler Temperature(s) °C and Other Remarks:			
						4.5 → 4.3, 3.8 → 3.6					

2 10/20/23
 3 Trip Blank

Added by BETA

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Lab PM: Mockler, Diana J		Carrier Tracking No(s):		COC No: 500-180528.1	
Client Contact: Shipping/Receiving		E-Mail: Diana Mockler@et.eurofins.com		State of Origin: Illinois		Page: Page 1 of 1	
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #:		500-241311-2	
Address: 13715 Rider Trail North, Earth City, MO, 63045		Due Date Requested: 11/8/2023		Analysis Requested:		Preservation Codes:	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		TAT Requested (days):		904.0/PreSep_0 Standard Target List		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)	
Email:		PO #:		903.0/PreSep_21 Standard Target List		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Project Name: Will County CCR		WO #:		Form M/MSD (Yes or No)		Total Number of Containers	
Site: NRG Midwest Generation Will County		Project #: 50011609		Field Filtered Sample (Yes or No)		3	
SSOW#:		Sample Date		Preservation Code:		Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume.	
Sample Identification - Client ID (Lab ID)		Sample Time		Matrix (W=solid, S=solid, O=wastewat, BT=Tissue, A=All)		Batch QC must be performed (dup. spikes, etc) - no NCMs concerning limited volume.	
MW-11 (500-241311-1)		10/19/23		Water		3	
MW-12 (500-241311-2)		10/19/23		Water		3	
Special Instructions/Note:		Special Instructions/Note:		Special Instructions/Note:		Special Instructions/Note:	
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.		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months		Special Instructions/QC Requirements:	
Possible Hazard Identification		Unconfirmed		Primary Deliverable Rank: 2		Method of Shipment	
Deliverable Requested: I, II, III, IV, Other (specify)		Date/Time: 10/20/23 1515		Received by: M. P. Piretta		Date/Time: 06/11/23 2023 0920	
Empty Kit Relinquished by:		Date/Time:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Received by:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:			



Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-241311-2

Login Number: 241311

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	4.3,3.6
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.	False	
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	

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-241311-2

Login Number: 241311

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 10/23/23 02:26 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: Will County CCR

Job ID: 500-241311-2

Client Sample ID: MW-11

Date Collected: 10/19/23 11:16

Date Received: 10/19/23 16:30

Lab Sample ID: 500-241311-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			633683	KAC	EET SL	10/26/23 10:30
Total/NA	Analysis	903.0		1	637959	SCB	EET SL	11/22/23 19:24
Total/NA	Prep	PrecSep_0			633684	KAC	EET SL	10/26/23 10:34
Total/NA	Analysis	904.0		1	637230	FLC	EET SL	11/16/23 12:22
Total/NA	Analysis	Ra226_Ra228		1	638008	EMH	EET SL	11/27/23 13:44

Client Sample ID: MW-12

Date Collected: 10/19/23 12:00

Date Received: 10/19/23 16:30

Lab Sample ID: 500-241311-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			633683	KAC	EET SL	10/26/23 10:30
Total/NA	Analysis	903.0		1	637959	SCB	EET SL	11/22/23 19:24
Total/NA	Prep	PrecSep_0			633684	KAC	EET SL	10/26/23 10:34
Total/NA	Analysis	904.0		1	637230	FLC	EET SL	11/16/23 12:23
Total/NA	Analysis	Ra226_Ra228		1	638008	EMH	EET SL	11/27/23 13:44

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: Will County CCR

Job ID: 500-241311-2

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)
500-241311-1	MW-11	92.2
500-241311-2	MW-12	89.9
LCS 160-633683/2-A	Lab Control Sample	95.5
MB 160-633683/1-A	Method Blank	94.5

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)
500-241311-1	MW-11	92.2	77.8
500-241311-2	MW-12	89.9	78.9
LCS 160-633684/2-A	Lab Control Sample	95.5	78.1
MB 160-633684/1-A	Method Blank	94.5	80.7

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

PROJECT NAME	NRG - WILL COUNTY STATION (12313.3)		DATE	10-24-23
Sample Name	MW-05	Start Time	09:01	
Condition of Well	GOOD			
Water Level	10-22	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	COLORLESS ODORLESS	
Volume Removed	2.25 Gals	W L at Sample Time	10.24	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCA + CCR + CCR DUPE	Sample Time	09:19	
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)
09:04	10.24	7.01	16.7	1.578	68.3	-2.7	1.2
09:07	10.27	6.72	16.6	1.679	39.8	2.9	0.9
09:10	10.23	6.69	16.8	1.680	27.4	21.1	0.8
09:13	10.25	6.69	17.0	1.678	22.1	30.4	0.8
09:16	10.23	6.68	17.1	1.675	19.1	35.8	0.8
09:19	10.24	6.68	17.2	1.674	17.9	37.9	0.8

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates



PROJECT NAME	NRG - WILL COUNTY STATION (12313.3)		DATE	10-24-23
Sample Name	MW-06	Start Time	10:17	
Condition of Well	Good			
Water Level	11.85	Total Depth	_____	
Well Diameter	PVC - 2 inch	Volume in Well	_____	
Method of Purge	Low-Flow	Purge Characteristics	Colorless Odorless	
Volume Removed	2.0 QTS.	W L at Sample Time	11.86	
Method of Sample	Low-Flow	Sample Characteristics	Appears Clear	
Sample Analysis	CCA + CLR	Sample Time	10:29	
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	11.89	7.52	18.1	1.264	56.0	-139.4	1.2
10:23	11.87	7.38	17.7	1.249	40.1	-131.3	1.0
10:26	11.89	7.35	17.6	1.240	33.7	-124.6	0.7
10:29	11.86	7.34	17.6	1.237	30.4	-122.6	0.8
10:31	11.84	7.35	17.6	1.249	31.4	-119.5	0.7
10:40	11.87	7.34	17.6	1.240	34.9	-119.5	0.7
10:45	11.89	7.34	17.6	1.237	27.4	-121.4	0.7

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates



PROJECT NAME	NRG - WILL COUNTY STATION (12313.3)		DATE	10-24-23
Sample Name	MW-09	Start Time	12:45	
Condition of Well	Good			
Water Level	11.77	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	COLORLESS MODERATE ODOR	
Volume Removed	2.25 QTS	W L at Sample Time	11.90	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCA + CCR INIS + CCR 253s	Sample Time	13:00	
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)
12:48	11.81	7.63	20.1	1.747	71.3	-198.5	5.6
12:51	11.86	7.56	20.4	1.746	66.2	-201.1	4.2
12:54	—	8.12	20.5	1.726	55.0	-195.1	7.2
12:57	11.88	8.65	20.0	1.717	23.0	-207.0	13.3
13:00	11.90	8.68	19.8	1.715	19.1	-208.1	9.5

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates



PROJECT NAME	NRG - WILL COUNTY STATION (12313.3)		DATE	10-24-23
Sample Name	MW-10	Start Time	11:23	
Condition of Well	GOOD			
Water Level	10.69	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	COLORLESS SLIGHT ODOR	
Volume Removed	2.0 QTS	W L at Sample Time	10.80	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCA + CCR	Sample Time	11:38	
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)
11:26	10.74	7.38	17.1	1.919	56.0	-144.6	11.8
11:29	10.79	7.20	16.8	1.857	37.4	-127.0	8.0
11:32	10.81	7.19	17.2	1.854	25.2	-126.1	7.9
11:35	10.83	7.19	17.3	1.846	19.8	-125.8	5.9
11:38	10.80	7.19	17.4	1.844	18.4	-125.3	5.4

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates



PROJECT NAME	NRG - WILL COUNTY STATION (12313.3)		DATE	10-19-23
Sample Name	MW-11	Start Time	11:01	
Condition of Well	GOOD			
Water Level	9.93	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	COLORLESS SLIGHT ODOR	
Volume Removed	2.5 GRS	W L at Sample Time	10.18	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	ECR	Sample Time	11:16	
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)
11:04	—	7.16	15.7	1.495	54.1	-100.1	7.41
11:07	10.2	7.23	15.5	1.518	28.6	-110.4	6.5
11:10	10.17	7.24	15.4	1.528	22.3	-126.5	5.8
11:13	10.19	7.18	15.5	1.540	17.8	-135.9	4.3
11:16	10.18	7.12	15.5	1.548	16.2	-136.3	3.9

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates



PROJECT NAME	NRG - WILL COUNTY STATION (12313.3)		DATE	10-19-23
Sample Name	MW-12	Start Time	11:42	
Condition of Well	GOOD			
Water Level	10.19	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	COLORLESS SLIGHT ODOR	
Volume Removed	3.0 GALS	W L at Sample Time	10.21	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCR	Sample Time	12:00	
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)
11:45	10.2	7.00	15.2	2.012	44.8	-143.0	1.7
11:48	10.21	6.99	14.4	2.131	27.4	-101.2	1.1
11:51	10.24	6.99	14.5	2.138	22.8	-84.3	1.6
11:54	10.22	6.99	14.5	2.144	17.9	-72.8	2.4
11:57	10.22	6.99	14.6	2.149	14.7	-66.9	2.7
12:00	10.21	6.99	14.6	2.152	13.5	-64.5	3.0

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

