

## **DATA SUMMARY POSTING**

Station: Midwest Generation Joliet #29 Generating Station

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

In accordance with the new Ill. Adm. Code Title 35, Part 845: Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments (State CCR Rule) groundwater monitoring was completed during the 2<sup>nd</sup> quarter 2025 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.

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

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

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228	Selenium	Thallium	Turbidity	
MW-10 upgradient	10/28/2015	0.47	100	200	0.41	7.04	84	790	< 0.0030	< 0.0010	0.041	^< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.013	< 0.00020	0.0060	0.2981	< 0.0025	< 0.0020	NA	
	2/10/2016	0.41	100	210	0.44	7.17	120	820	< 0.0030	0.0010	0.043	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.011	< 0.00020	0.0067	< 0.438	< 0.0025	< 0.0020	NA	
	5/12/2016	0.29	100	300	0.42	7.02	110	920	< 0.0030	< 0.0010	0.046	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.012	< 0.00020	0.0051	< 0.414	< 0.0025	< 0.0020	NA	
	8/31/2016	0.36	89	170	0.46	6.95	100	760	< 0.0030	< 0.0010	0.039	^< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.010	< 0.00020	0.0077	< 0.394	< 0.0025	< 0.0020	NA	
	11/2/2016	0.48	100	130	0.45	6.99	95	720	< 0.0030	0.0018	0.035	< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.0014	0.011	< 0.00020	0.0061	0.626	< 0.0025	< 0.0020	NA	
	2/6/2017	0.44	120	190	0.36	6.99	88	820	< 0.0030	0.0011	0.048	< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.00086	0.014	< 0.00020	0.0056	< 0.389	< 0.0025	< 0.0020	NA	
	4/26/2017	0.35	120	200	0.35	7.27	87	760	< 0.0030	0.0015	0.046	< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.0012	< 0.010	< 0.00020	0.0060	< 0.34	< 0.0025	< 0.0020	NA	
	6/14/2017	0.29	91	160	0.43	7.48	75	690	< 0.0030	< 0.0010	0.034	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.012	< 0.00020	0.0072	< 0.356	< 0.0025	< 0.0020	NA	
	8/2/2017	0.45	97	170	0.38	7.23	110	750	< 0.0030	0.0011	0.036	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.011	< 0.00020	0.0079	< 0.429	< 0.0025	< 0.0020	NA	
	10/18/2017	0.61	120	140	0.41	7.11	130	820	< 0.0030	0.0012	0.040	^< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.00059	0.013	< 0.00020	0.0066	< 0.422	< 0.0025	^< 0.0020	NA	
	4/24/2018	0.4	110	260	0.39	7.28	120	910	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/17/2018	0.63	120	180	0.42	7.30	110	810	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/24/2018 R	0.44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/7/2019	0.56	130	410	0.39	7.17	95	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/3/2019 R	NA	NA	230	NA	NA	NA	830	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/7/2019	0.35	90	130	0.36	7.40	59	650	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/20/2020	0.85	120	250	0.41	6.90	100	960	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/11/2020 R	0.26	NA	NA	NA	NA	NA	770	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/22/2020	0.34	110	230	0.41	7.11	93	850	< 0.0030	0.0010	0.043	^< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.011	< 0.00020	0.0057	NA	< 0.0025	< 0.0020	NA	
	5/18/2021	0.33	140	350	0.39	7.16	210	1200	< 0.0030	0.0014	0.060	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.015	< 0.00020	0.0055	< 0.480	< 0.0025	< 0.0020	3.73	
	6/29/2021 R	NA	160	420	NA	NA	190	1300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.49
	8/30/2021	0.28	120	330	0.37	7.56	170	990	^+ < 0.0030	0.0012	0.051	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.012	< 0.00020	0.0065	0.51	< 0.0025	< 0.0020	9.30	
	11/16/2021	0.39	120	260	0.38	7.01	150	1000	< 0.0030	0.0012	0.049	^+ < 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.011	< 0.00020	0.0066	0.692	< 0.0025	< 0.0020	5.59	
	3/3/2022	0.47	120	280	0.41	7.05	190	1000	< 0.0030	0.0014	0.055	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.013	< 0.00020	0.0066	< 0.40	< 0.0025	< 0.0020	2.86	
	5/26/2022	0.39	120	280	0.41	6.90	160	1000	< 0.0030	0.0013	0.046	^+ < 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	< 0.010	< 0.00020	0.0064	< 0.593	< 0.0025	< 0.0020	2.08	
	8/31/2022	0.33	110	240	0.41	6.58	160	970	< 0.0030	0.0012	0.042	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	< 0.010	< 0.00020	0.0057	0.534	< 0.0025	< 0.0020	2.93	
	11/9/2022	0.32	110	240	0.57	7.00	150	880	< 0.0030	0.0014	0.043	< 0.0010	< 0.00050	< 0.0050	< 0.0010	^+ < 0.00050	0.010	< 0.00020	0.0055	0.728	< 0.0025	< 0.0020	19.60	
	12/20/2022 R	NA	NA	NA	0.68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/28/2023	0.36	130	330	0.38	7.06	170	1200	< 0.0030	0.0012	0.053	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.013	< 0.00020	0.0058	< 0.787	< 0.0025	< 0.0020	17.13	
	5/3/2023	0.37	130	310	0.39	6.99	190	1100	< 0.0030	< 0.0010	0.053	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.014	< 0.00020	0.0068	< 0.487	< 0.0025	< 0.0020	2.60	
	7/20/2023	0.33	110	250	0.39	6.95	160	960	< 0.0030	< 0.0010	0.048	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.011	< 0.00020	0.0053	0.623	< 0.0025	< 0.0020	5.60	
	10/26/2023	0.40	120	300	0.41	6.96	160	1100	< 0.0030	0.0011	0.050	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.011	< 0.00020	0.0064	0.739	< 0.0025	< 0.0020	1.40	
	1/23/2024	0.49	110	260	0.37	6.96	160	970	^+ < 0.0030	0.0013	0.056	^+ < 0.0010	< 0.00050	< 0.0050	< 0.0010	0.00064	0.014	< 0.00020	0.0067	0.720	< 0.0025	< 0.0020	82.70	
	5/22/2024	0.38	110	180	0.41	7.17	120	840	< 0.0030	< 0.0010	0.040	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.013	< 0.00020	0.0067	< 0.633	< 0.0025	< 0.0020	49.31	
	7/30/2024	0.44	120	170	0.38	7.58	150	880	< 0.0030	< 0.0010	0.045	< 0.0010	< 0.00050	< 0.0050	< 0.0010	^+ < 0.00050	0.013	< 0.00020	0.0071	0.455	< 0.0025	< 0.0020	2.27	
10/29/2024	0.46	130	220	0.38	7.30	160	1000	< 0.0030	< 0.0010	0.048	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.013	< 0.00020	0.0063	< 0.337	< 0.0025	< 0.0020	3.17		
1/29/2025	0.50	140	250	0.40	7.13	150	1100	< 0.0030	0.0011	0.011	^+ < 0.0010	< 0.00050	< 0.0050	< 0.0010	0.00089	0.015	< 0.00020	0.0066	< -0.0345	< 0.0025	< 0.0020	60.43		
4/30/2025	0.38	120	280	0.42	7.27	170	1100	< 0.0030	< 0.0010	0.053	< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.00050	0.013	< 0.00020	0.0068	0.772	< 0.0025	< 0.0020	9.43		
MW-03 downgradient	10/28/2015	0.34	110	230	0.41	7.11	110	960	< 0.0030	0.0015	0.10	^< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.013	< 0.00020	< 0.0050	0.41	< 0.0025	< 0.0020	NA	
	2/10/2016	0.49	100	220	0.44	7.31	130	790	< 0.0030	0.0017	0.10	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.011	< 0.00020	0.0060	< 1.68	< 0.0045	< 0.0020	NA	
	5/10/2016	0.48	95	240	0.44	7.07	130	800	< 0.0030	0.0011	0.095	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.012	< 0.00020	0.0062	< 0.326	0.0030	< 0.0020	NA	
	8/31/2016	0.49	100	250	0.45	7.18	120	920	< 0.0030	0.0013	0.095	^< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.012	< 0.00020	0.0086	< 0.373	0.0051	< 0.0020	NA	
	11/2/2016	0.34	87	190	0.44	7.45	94	780	< 0.0030	0.0019	0.082	< 0.0010	< 0.00050	0.0051	< 0.0010	< 0.00050	< 0.010	< 0.00020	0.0059	0.965	0.0032	< 0.0020	NA	
	2/6/2017	0.40	97	140	0.39	7.35	77	720	< 0.0030	0.0019	0.093	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.012	< 0.00020	0.0066	< 0.356	0.0028	< 0.0020	NA	
	4/26/2017	0.54	100	210	0.36	7.03	120																	

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

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228	Selenium	Thallium	Turbidity	
MW-04 downgradient	10/28/2015	0.34	94	F1 200	0.45	7.07	83	740	< 0.0030	0.0013	0.082	^ < 0.0010	< 0.00050	< 0.0050	0.0063	< 0.00050	0.013	< 0.00020	0.0065	0.741	< 0.0025	< 0.0020	NA	
	2/10/2016	0.32	97	210	0.47	7.22	140	810	< 0.0030	0.0018	0.088	< 0.0010	< 0.00050	< 0.0050	0.0074	0.00062	0.011	< 0.00020	0.0063	< 1.52	< 0.0025	< 0.0020	NA	
	5/10/2016	0.47	100	260	0.46	6.71	150	900	< 0.0030	0.0014	0.088	< 0.0010	< 0.00050	< 0.0050	0.0086	< 0.00050	0.012	< 0.00020	0.0088	< 0.365	< 0.0025	< 0.0020	NA	
	8/31/2016	0.42	100	210	0.45	7.07	120	890	< 0.0030	0.0014	0.086	^ < 0.0010	< 0.00050	< 0.0050	0.0035	< 0.00050	0.011	< 0.00020	0.0083	0.432	< 0.0025	< 0.0020	NA	
	11/2/2016	0.32	98	160	0.43	7.25	83	750	< 0.0030	0.0025	0.079	< 0.0010	< 0.00050	< 0.0050	0.010	0.0012	0.012	< 0.00020	0.0070	< 0.463	< 0.0025	< 0.0020	NA	
	2/6/2017	0.40	110	200	0.37	7.19	98	790	< 0.0030	0.0015	0.100	< 0.0010	< 0.00050	< 0.0050	0.0160	< 0.00050	0.013	< 0.00020	0.0071	< 0.356	< 0.0025	< 0.0020	NA	
	4/26/2017	0.33	100	220	0.37	7.46	89	770	< 0.0030	0.0021	0.095	< 0.0010	< 0.00050	< 0.0050	0.0078	0.00055	0.012	< 0.00020	0.0069	< 0.35	< 0.0025	< 0.0020	NA	
	6/14/2017	0.37	92	190	0.47	7.45	80	770	< 0.0030	0.0013	0.078	< 0.0010	< 0.00050	< 0.0050	0.012	< 0.00050	0.013	< 0.00020	0.0085	< 0.309	< 0.0025	< 0.0020	NA	
	8/2/2017	0.35	93	180	0.43	7.41	100	770	< 0.0030	0.0013	0.077	< 0.0010	< 0.00050	0.040	0.0031	< 0.00050	0.012	< 0.00020	0.0091	< 0.282	0.0029	< 0.0020	NA	
	10/18/2017	0.54	97	140	0.45	7.20	120	790	< 0.0030	0.0019	0.082	^ < 0.0010	< 0.00050	< 0.0050	0.0046	0.00077	0.015	< 0.00020	0.0071	0.423	0.0030	^ < 0.0020	NA	
	4/24/2018	0.40	110	240	0.43	7.21	160	940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/31/2018 R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/17/2018	0.29	100	230	0.45	7.20	130	840	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/7/2019	0.76	120	340	0.42	7.27	120	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/3/2019 R	0.23	NA	250	NA	NA	NA	870	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/6/2019	0.30	77	140	0.41	7.33	53	670	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/20/2020	0.79	110	250	0.45	7.30	110	1100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/11/2020 R	0.28	NA	NA	NA	NA	NA	850	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/22/2020	0.33	100	190	0.48	7.15	83	770	< 0.0030	0.0015	0.089	^ < 0.0010	< 0.00050	< 0.0050	0.0082	< 0.00050	0.013	< 0.00020	0.0061	NA	< 0.0025	< 0.0020	NA	
	5/18/2021	0.22	120	280	0.42	7.30	190	1100	< 0.0030	0.0019	0.12	< 0.0010	< 0.00050	< 0.0050	0.0037	< 0.00050	0.014	< 0.00020	< 0.0050	< 0.4450	< 0.0025	< 0.0020	2.52	
	6/29/2021 R	NA	NA	NA	NA	7.36	190	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.34
	8/30/2021	0.33	120	330	0.40	7.46	170	1000	^+ < 0.0030	0.0016	0.12	< 0.0010	< 0.00050	< 0.0050	0.0034	< 0.00050	0.013	< 0.00020	0.0057	0.877	0.0030	< 0.0020	18.30	
	11/16/2021	0.30	130	290	0.42	7.11	140	1000	< 0.0030	0.0021	0.12	^+ < 0.0010	< 0.00050	< 0.0050	0.0040	< 0.00050	0.011	< 0.00020	0.0059	0.892	< 0.0025	< 0.0020	4.20	
	3/3/2022	0.31	120	220	0.42	7.11	170	1300	< 0.0030	0.0018	0.12	< 0.0010	< 0.00050	< 0.0050	0.0029	< 0.00050	0.012	< 0.00020	0.0056	< 0.437	< 0.0025	< 0.0020	0.00	
	5/26/2022	0.26	110	290	0.44	6.94	150	1100	< 0.0030	0.0019	0.10	^+ < 0.0010	< 0.00050	< 0.0050	0.0036	< 0.00050	< 0.010	< 0.00020	< 0.0050	0.624	< 0.0025	< 0.0020	1.23	
	8/31/2022	0.32	120	240	0.45	6.38	150	870	< 0.0030	0.0016	0.11	< 0.0010	< 0.00050	< 0.0050	0.0018	< 0.00050	0.012	< 0.00020	0.0055	0.804	< 0.0025	< 0.0020	3.78	
	11/9/2022	0.34	120	240	0.61	7.08	150	940	< 0.0030	0.0021	0.11	< 0.0010	< 0.00050	< 0.0050	0.0030	^+ < 0.00050	0.012	< 0.00020	0.0056	0.666	< 0.0025	< 0.0020	43.50	
	2/28/2023	0.34	120	280	0.40	7.16	150	1100	< 0.0030	0.0019	0.10	< 0.0010	< 0.00050	< 0.0050	0.0078	< 0.00050	0.011	< 0.00020	0.0058	< 0.593	< 0.0025	< 0.0020	62.10	
	5/3/2023	0.28	110	290	0.40	6.97	160	1100	< 0.0030	0.0014	0.095	< 0.0010	< 0.00050	< 0.0050	0.0074	< 0.00050	0.011	< 0.00020	0.0051	< 0.488	< 0.0025	< 0.0020	6.30	
	7/20/2023	0.37	120	240	0.41	7.02	180	970	< 0.0030	0.0018	0.10	< 0.0010	< 0.00050	< 0.0050	0.0025	< 0.00050	0.012	< 0.00020	< 0.0050	< 0.601	0.0027	< 0.0020	6.00	
	10/26/2023	0.31	120	320	0.43	6.95	140	1100	< 0.0030	0.0016	0.094	< 0.0010	< 0.00050	< 0.0050	0.0063	< 0.00050	0.013	< 0.00020	0.0052	1.15	< 0.0025	< 0.0020	1.60	
	1/23/2024	0.42	99	200	0.38	6.93	150	970	^+ < 0.0030	0.002	0.091	^+ < 0.0010	< 0.00050	< 0.0050	0.0085	0.00051	0.018	< 0.00020	0.0056	< 0.649	< 0.0025	< 0.0020	80.10	
	5/22/2024	0.39	110	200	0.41	7.12	120	910	< 0.0030	0.0016	0.077	< 0.0010	< 0.00050	< 0.0050	0.0091	0.00054	0.013	< 0.00020	0.0056	0.586	< 0.0025	< 0.0020	24.27	
	7/30/2024	0.34	110	170	0.42	7.45	120	860	< 0.0030	0.0013	0.074	< 0.0010	< 0.00050	< 0.0050	0.0081	^+ < 0.00050	0.013	< 0.00020	0.0057	< 0.471	< 0.0025	< 0.0020	5.04	
	10/29/2024	0.38	120	190	0.43	7.32	120	980	< 0.0030	0.0013	0.078	< 0.0010	< 0.00050	< 0.0050	0.0095	< 0.00050	0.013	< 0.00020	0.0055	< 0.197	< 0.0025	< 0.0020	5.30	
	1/29/2025	0.36	120	210	0.46	7.16	140	920	< 0.0030	0.0015	0.079	^+ < 0.0010	< 0.00050	< 0.0050	0.013	< 0.00050	0.013	< 0.00020	0.0059	< 0.442	< 0.0025	< 0.0020	51.63	
	4/30/2025	0.35	130	290	0.39	7.27	160	1000	< 0.0030	0.0012	0.091	^+ < 0.0010	< 0.00050	< 0.0050	0.0079	< 0.00050	0.012	< 0.00020	0.0050	0.927	< 0.0025	< 0.0020	4.03	
	MW-05 downgradient	10/28/2015	0.64	100	160	0.39	7.12	790	< 0.0030	0.0011	0.057	< 0.0010	< 0.00050	< 0.0050	0.0013	< 0.00050	0.018	< 0.00020	0.0088	0.6231	0.0031	< 0.0020	NA	
		2/10/2016	0.46	110	220	0.39	7.25	790	< 0.0030	0.0028	0.071	< 0.0010	< 0.00050	0.0062	0.0013	0.0022	< 0.020	< 0.00020	F1 0.0053	1.09	< 0.0025	< 0.0020	NA	
		5/10/2016	0.80	150	220	0.46	6.88	290	950	< 0.0030	0.0023	0.075	< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.0022	0.014	< 0.00020	0.008	< 0.40	< 0.0025	< 0.0020	NA
8/31/2016		1.0	140	99	0.56	6.81	260	820	< 0.0030	< 0.0010	0.070	^ < 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	< 0.010	< 0.00020	0.012	< 0.42	0.020	< 0.0020	NA	
11/2/2016		0.41	98	130	0.37	7.26	100	700	< 0.0030	0.0022	0.056	< 0.0010	< 0.00050	0.0051	< 0.0010	0.0017	0.015	< 0.00020	0.0061	0.438	< 0.0025	< 0.0020	NA	
2/6/2017		0.48	150	180	0.30	7.22	120	790	< 0.0030	0.0016	0.082	< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.0016	0.021	< 0.00020	< 0.0050	0.564	0.0029	< 0.0020	NA	
4/26/2017		0.67	110	F1 190	0.37	7.28	170	770	< 0.0030	0.0014	0.063	< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.00080	< 0.010	< 0.00020	0.0066	< 0.411	0.013	< 0.0020	NA	
6/14/2017		0.44	75	150	0.46	7.47	110	670	< 0.0030	0.0012	0.044	< 0.0010	< 0.00050											

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

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

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

**JOB DESCRIPTION**

Joliet #29 CCR

**JOB NUMBER**

500-267585-1

# Eurofins Chicago

## Job Notes

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# Case Narrative

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

Job ID: 500-267585-1

**Job ID: 500-267585-1**

**Eurofins Chicago**

## Job Narrative 500-267585-1

### Receipt

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

### Metals

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

### General Chemistry

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

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# Method Summary

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

Job ID: 500-267585-1

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

#### Protocol References:

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

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

#### Laboratory References:

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

# Sample Summary

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

Job ID: 500-267585-1

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

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# Client Sample Results

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

Job ID: 500-267585-1

**Client Sample ID: MW-03**  
**Date Collected: 04/30/25 09:13**  
**Date Received: 04/30/25 16:15**

**Lab Sample ID: 500-267585-1**  
**Matrix: Water**

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

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

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

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

**General Chemistry**

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

# Client Sample Results

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

Job ID: 500-267585-1

**Client Sample ID: MW-04**  
**Date Collected: 04/30/25 10:10**  
**Date Received: 04/30/25 16:15**

**Lab Sample ID: 500-267585-2**  
**Matrix: Water**

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

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

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

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

**General Chemistry**

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

# Client Sample Results

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

Job ID: 500-267585-1

**Client Sample ID: MW-05**  
**Date Collected: 04/30/25 13:06**  
**Date Received: 04/30/25 16:15**

**Lab Sample ID: 500-267585-3**  
**Matrix: Water**

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

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

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

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

**General Chemistry**

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

# Client Sample Results

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

Job ID: 500-267585-1

**Client Sample ID: MW-10**  
**Date Collected: 04/30/25 14:33**  
**Date Received: 04/30/25 16:15**

**Lab Sample ID: 500-267585-4**  
**Matrix: Water**

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

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

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

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

**General Chemistry**

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

# Client Sample Results

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

Job ID: 500-267585-1

**Client Sample ID: Duplicate**

**Lab Sample ID: 500-267585-5**

Date Collected: 04/30/25 00:00

Matrix: Water

Date Received: 04/30/25 16:15

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

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

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

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

**General Chemistry**

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

# Definitions/Glossary

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

Job ID: 500-267585-1

## Qualifiers

### General Chemistry

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

## Glossary

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

# QC Association Summary

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

Job ID: 500-267585-1

## Metals

### Prep Batch: 816622

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

### Analysis Batch: 816904

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

### Prep Batch: 816972

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

### Prep Batch: 816974

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

### Analysis Batch: 817255

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

### Analysis Batch: 817410

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

# QC Association Summary

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

Job ID: 500-267585-1

## General Chemistry

### Analysis Batch: 816626

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

### Analysis Batch: 816630

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

### Analysis Batch: 817184

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

### Analysis Batch: 817192

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

# QC Sample Results

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

Job ID: 500-267585-1

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

**Lab Sample ID: MB 500-816972/1-A**  
**Matrix: Water**  
**Analysis Batch: 817255**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 816972**

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

**Lab Sample ID: MB 500-816972/1-A**  
**Matrix: Water**  
**Analysis Batch: 817410**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 816972**

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

**Lab Sample ID: LCS 500-816972/2-A**  
**Matrix: Water**  
**Analysis Batch: 817255**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 816972**

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

**Lab Sample ID: LCS 500-816972/2-A**  
**Matrix: Water**  
**Analysis Batch: 817410**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 816972**

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

# QC Sample Results

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

Job ID: 500-267585-1

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

**Lab Sample ID: MB 500-816974/1-A**  
**Matrix: Water**  
**Analysis Batch: 817410**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 816974**

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

**Lab Sample ID: LCS 500-816974/2-A**  
**Matrix: Water**  
**Analysis Batch: 817410**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 816974**

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

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 500-816622/12-A**  
**Matrix: Water**  
**Analysis Batch: 816904**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 816622**

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

# QC Sample Results

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

Job ID: 500-267585-1

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

# QC Sample Results

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

Job ID: 500-267585-1

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

Lab Sample ID: LCS 500-817192/62  
 Matrix: Water  
 Analysis Batch: 817192

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

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

## Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-817184/31  
 Matrix: Water  
 Analysis Batch: 817184

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

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

Lab Sample ID: MB 500-817184/61  
 Matrix: Water  
 Analysis Batch: 817184

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

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

Lab Sample ID: LCS 500-817184/32  
 Matrix: Water  
 Analysis Batch: 817184

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

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

Lab Sample ID: LCS 500-817184/62  
 Matrix: Water  
 Analysis Batch: 817184

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

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

Lab Sample ID: 500-267585-3 MS  
 Matrix: Water  
 Analysis Batch: 817184

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

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

Lab Sample ID: 500-267585-3 MSD  
 Matrix: Water  
 Analysis Batch: 817184

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

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

# QC Sample Results

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

Job ID: 500-267585-1

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

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

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

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

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

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

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

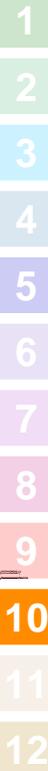


**Eurofins Chicago**

18410 Crossing Drive Suite E  
 Tinley Park, IL 60487  
 Phone 708-534-5200 Fax 708-534-5211

**Chain of Custody Record**

<b>Client Information</b>		Sampler: <b>JAN JOHN HANSEN</b>		Lab PM: Mockler, Diana J		Carrier Tracking No(s):		COC No: 500-136134-45941 1				
Client Contact: Patrick Allenstein		Phone: <b>630 290 6850</b>		E-Mail: Diana Mockler@et.eurofinsus.com		State of Origin:		Page: Page 1 of 1				
Company: KPRG and Associates, Inc.				PWSID:		<b>Analysis Requested</b>						
Address: 14665 West Lisbon Road, Suite 1A		Due Date Requested:		Field Filtered Sample (Yes or No) Perform MSMSD (Yes or No) 6010C, 6020A, 7470A 2540C, 4500_F_C, SM4500_CI_E, SM4500_SO4_E 903.0, 904.0		Total Number of Containers:		Job #: <b>500-267585</b>				
City: Brookfield		TAT Requested (days):						Preservation Codes: D - HNO3 N - None				
State, Zip: WI, 53005		Compliance Project. <input type="checkbox"/> Yes <input type="checkbox"/> No						Other:				
Phone:		PO #: 4502187984										
Email: patricka@kprginc.com		WO #:										
Project Name: Joliet #29 CCR/ Event Desc: Quarterly MWG Joliet #29 CCR		Project #: 50011568										
Site: Illinois		SSOW#:										
<b>Sample Identification</b>		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MSMSD (Yes or No)	6010C, 6020A, 7470A	2540C, 4500_F_C, SM4500_CI_E, SM4500_SO4_E	903.0, 904.0	Total Number of Containers:	Special Instructions/Note:
		Preservation Code:				D	N	D				
1	MW-03	4-30-25	09:13	Water	Water	N	N	X	X	X	5	
2	MW-04	4-30-25	10:10	Water	Water	N	N	X	X	X	5	
3	MW-05	4-30-25	13:06	Water	Water	N	N	X	X	X	5	
4	MW-10	4-30-25	14:33	Water	Water	N	N	X	X	X	5	
5	Duplicate	4-30-25	—	Water	Water	N	N	X	X	X	5	
				Water								
<b>Possible Hazard Identification</b>						<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>						
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months						
Deliverable Requested 1, II, III, IV, Other (specify)						Special Instructions/QC Requirements						
Empty Kit Relinquished by:		Date		Time		Method of Shipment.						
Relinquished by: <i>[Signature]</i>		Date/Time: 4-30-25 16:15		Company: KPRG		Received by: <i>[Signature]</i>		Date/Time: 04/30/25 16:15		Company: EETA		
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:		
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:		
Custody Seals Intact. <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks. 2.7 → 3.0, 4.1 → 4.4 <i>EB</i>								



## Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-267585-1

**Login Number: 267585**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

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

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

# Lab Chronicle

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

Job ID: 500-267585-1

**Client Sample ID: MW-03**  
**Date Collected: 04/30/25 09:13**  
**Date Received: 04/30/25 16:15**

**Lab Sample ID: 500-267585-1**  
**Matrix: Water**

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

**Client Sample ID: MW-04**  
**Date Collected: 04/30/25 10:10**  
**Date Received: 04/30/25 16:15**

**Lab Sample ID: 500-267585-2**  
**Matrix: Water**

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

**Client Sample ID: MW-05**  
**Date Collected: 04/30/25 13:06**  
**Date Received: 04/30/25 16:15**

**Lab Sample ID: 500-267585-3**  
**Matrix: Water**

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

# Lab Chronicle

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

Job ID: 500-267585-1

**Client Sample ID: MW-10**  
**Date Collected: 04/30/25 14:33**  
**Date Received: 04/30/25 16:15**

**Lab Sample ID: 500-267585-4**  
**Matrix: Water**

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

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

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

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

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

**Laboratory References:**

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

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

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

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

**JOB DESCRIPTION**

Joliet #29 CCR (RAD)

**JOB NUMBER**

500-267585-2

# Eurofins Chicago

## Job Notes

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

## Authorization



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Authorized for release by  
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# Case Narrative

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

Job ID: 500-267585-2

**Job ID: 500-267585-2**

**Eurofins Chicago**

## Job Narrative 500-267585-2

### Receipt

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

### Gas Flow Proportional Counter

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

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

### Rad

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

Eurofins Chicago



# Method Summary

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

Job ID: 500-267585-2

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

**Protocol References:**

EPA = US Environmental Protection Agency

None = None

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

**Laboratory References:**

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



# Sample Summary

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

Job ID: 500-267585-2

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Client Sample Results

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

Job ID: 500-267585-2

**Client Sample ID: MW-03**

**Lab Sample ID: 500-267585-1**

Date Collected: 04/30/25 09:13

Matrix: Water

Date Received: 04/30/25 16:15

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

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

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

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

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

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

# Client Sample Results

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

Job ID: 500-267585-2

**Client Sample ID: MW-04**

**Lab Sample ID: 500-267585-2**

Date Collected: 04/30/25 10:10

Matrix: Water

Date Received: 04/30/25 16:15

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

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

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

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

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

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

# Client Sample Results

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

Job ID: 500-267585-2

**Client Sample ID: MW-05**

**Lab Sample ID: 500-267585-3**

Date Collected: 04/30/25 13:06

Matrix: Water

Date Received: 04/30/25 16:15

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

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

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

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

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

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

# Client Sample Results

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

Job ID: 500-267585-2

**Client Sample ID: MW-10**

**Lab Sample ID: 500-267585-4**

Date Collected: 04/30/25 14:33

Matrix: Water

Date Received: 04/30/25 16:15

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

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

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

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

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

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

# Client Sample Results

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

Job ID: 500-267585-2

**Client Sample ID: Duplicate**

**Lab Sample ID: 500-267585-5**

Date Collected: 04/30/25 00:00

Matrix: Water

Date Received: 04/30/25 16:15

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

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

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

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

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

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

# Definitions/Glossary

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

Job ID: 500-267585-2

## Qualifiers

### Rad

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

## Glossary

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

# QC Association Summary

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

Job ID: 500-267585-2

## Rad

### Prep Batch: 716178

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

### Prep Batch: 716180

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

# QC Sample Results

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

Job ID: 500-267585-2

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

**Lab Sample ID: MB 160-716178/1-A**  
**Matrix: Water**  
**Analysis Batch: 720203**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 716178**

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

**Lab Sample ID: LCS 160-716178/2-A**  
**Matrix: Water**  
**Analysis Batch: 720203**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 716178**

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

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

**Lab Sample ID: MB 160-716180/1-A**  
**Matrix: Water**  
**Analysis Batch: 720153**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 716180**

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

**Lab Sample ID: LCS 160-716180/2-A**  
**Matrix: Water**  
**Analysis Batch: 720153**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 716180**

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

**Eurofins Chicago**

18410 Crossing Drive Suite E  
 Tinley Park, IL 60487  
 Phone 708-534-5200 Fax 708-534-5211

**Chain of Custody Record**

<b>Client Information</b>		Sampler: <b>JAN JOHN HANSEN</b>		Lab PM: Mockler, Diana J		Carrier Tracking No(s):		COC No: 500-136134-45941 1				
Client Contact: Patrick Allenstein		Phone: <b>630 290 6850</b>		E-Mail: Diana Mockler@et.eurofinsus.com		State of Origin:		Page: Page 1 of 1				
Company: KPRG and Associates, Inc.				PWSID:		<b>Analysis Requested</b>						
Address: 14665 West Lisbon Road, Suite 1A		Due Date Requested:		Field Filtered Sample (Yes or No) Perform MSMSD (Yes or No) 6010C, 6020A, 7470A 2540C, 4500_F_C, SM4500_CI_E, SM4500_SO4_E 903.0, 904.0		Total Number of Containers:		Job #: <b>500-267585</b>				
City: Brookfield		TAT Requested (days):						Preservation Codes: D - HNO3 N - None				
State, Zip: WI, 53005		Compliance Project. <input type="checkbox"/> Yes <input type="checkbox"/> No						Other:				
Phone:		PO #: 4502187984										
Email: patricka@kprginc.com		WO #:										
Project Name: Joliet #29 CCR/ Event Desc: Quarterly MWG Joliet #29 CCR		Project #: 50011568										
Site: Illinois		SSOW#:										
<b>Sample Identification</b>		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MSMSD (Yes or No)	6010C, 6020A, 7470A	2540C, 4500_F_C, SM4500_CI_E, SM4500_SO4_E	903.0, 904.0	Total Number of Containers:	Special Instructions/Note:
		Preservation Code:				D	N	D				
1	MW-03	4-30-25	09:13	Water	Water	N	N	X	X	X	5	
2	MW-04	4-30-25	10:10	Water	Water	N	N	X	X	X	5	
3	MW-05	4-30-25	13:06	Water	Water	N	N	X	X	X	5	
4	MW-10	4-30-25	14:33	Water	Water	N	N	X	X	X	5	
5	Duplicate	4-30-25	—	Water	Water	N	N	X	X	X	5	
				Water								
<b>Possible Hazard Identification</b>						<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>						
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months						
Deliverable Requested 1, II, III, IV, Other (specify)						Special Instructions/QC Requirements						
Empty Kit Relinquished by:		Date		Time		Method of Shipment.						
Relinquished by: <i>[Signature]</i>		Date/Time: 4-30-25 16:15		Company: KPRG		Received by: <i>[Signature]</i>		Date/Time: 04/30/25 16:15		Company: EETA		
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:		
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:		
Custody Seals Intact. <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks. 2.7 → 3.0, 4.1 → 4.4 <i>EB</i>								



## Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-267585-2

**Login Number: 267585**

**List Source: Eurofins Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

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

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

## Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-267585-2

**Login Number: 267585**

**List Number: 2**

**Creator: Pinette, Meadow L**

**List Source: Eurofins St. Louis**

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

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

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



# Lab Chronicle

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

Job ID: 500-267585-2

**Client Sample ID: MW-03**  
 Date Collected: 04/30/25 09:13  
 Date Received: 04/30/25 16:15

**Lab Sample ID: 500-267585-1**  
 Matrix: Water

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

**Client Sample ID: MW-04**  
 Date Collected: 04/30/25 10:10  
 Date Received: 04/30/25 16:15

**Lab Sample ID: 500-267585-2**  
 Matrix: Water

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

**Client Sample ID: MW-05**  
 Date Collected: 04/30/25 13:06  
 Date Received: 04/30/25 16:15

**Lab Sample ID: 500-267585-3**  
 Matrix: Water

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

**Client Sample ID: MW-10**  
 Date Collected: 04/30/25 14:33  
 Date Received: 04/30/25 16:15

**Lab Sample ID: 500-267585-4**  
 Matrix: Water

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

# Lab Chronicle

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

Job ID: 500-267585-2

**Client Sample ID: Duplicate**

**Lab Sample ID: 500-267585-5**

**Date Collected: 04/30/25 00:00**

**Matrix: Water**

**Date Received: 04/30/25 16:15**

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

**Laboratory References:**

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



# Tracer/Carrier Summary

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

Job ID: 500-267585-2

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

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
500-267585-1	MW-03	92.8	
500-267585-2	MW-04	92.3	
500-267585-3	MW-05	87.1	
500-267585-4	MW-10	92.5	
500-267585-5	Duplicate	91.5	
LCS 160-716178/2-A	Lab Control Sample	86.6	
MB 160-716178/1-A	Method Blank	84.3	
<b>Tracer/Carrier Legend</b>			
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)
500-267585-1	MW-03	92.8	80.0
500-267585-2	MW-04	92.3	78.9
500-267585-3	MW-05	87.1	79.6
500-267585-4	MW-10	92.5	79.3
500-267585-5	Duplicate	91.5	77.4
LCS 160-716180/2-A	Lab Control Sample	86.6	79.3
MB 160-716180/1-A	Method Blank	84.3	79.6
<b>Tracer/Carrier Legend</b>			
Ba = Ba Carrier			
Y = Y Carrier			

PROJECT NAME	NRG - JOLIET #29 STATION (12313.0)		DATE	4-30-25
Sample Name	MW-03	Start Time	08:57	
Condition of Well	Good			
Water Level	33.08	Total Depth	_____	
Well Diameter	PVC - 2 inch	Volume in Well	_____	
Method of Purge	Low-Flow	Purge Characteristics	COLORLESS ODORLESS	
Volume Removed	2.75 Gal.	W L at Sample Time	33.08	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR CCA FILTERED.	
Sample Analysis	CCA + CCR	Sample Time	09:15	
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)
09:00	33.08	7.45	12.9	1.260	7.86	222.3	7.13
09:03	33.09	7.35	13.1	1.328	6.90	232.6	9.01
09:06	33.09	7.29	13.1	1.362	6.40	240.4	7.28
09:09	33.08	7.26	13.2	1.373	6.01	245.3	7.64
09:12	33.08	7.24	13.2	1.383	5.75	249.6	8.75
09:15	33.08	7.23	13.2	1.385	5.71	250.1	8.64
_____							

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates



PROJECT NAME	NRG - JOLIET #29 STATION (12313.0)		DATE	4-30-25
Sample Name	MW-04	Start Time	09:58	
Condition of Well	Good			
Water Level	33.32	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	COLORLESS ODORLESS	
Volume Removed	1.0 Qt.	W L at Sample Time	33.34	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR CCA FILTERED.	
Sample Analysis	CCA + CCR	Sample Time	10:10	
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)
10:01	33.34	7.36	13.2	1.255	6.69	212.9	4.85
10:04	33.34	7.29	13.4	1.303	6.73	223.9	4.15
10:07	33.34	7.27	13.8	1.364	6.73	234.4	3.78
10:10	33.34	7.27	13.8	1.381	6.73	237.1	4.03
—							

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

PROJECT NAME	NRG - JOLIET #29 STATION (12313.0)		DATE	4-30-25
Sample Name	MW-05	Start Time	12:48	
Condition of Well	Good			
Water Level	34.05	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	COLLECTED SLIGHT ODOR	
Volume Removed	2.0 GGS.	W L at Sample Time	34.05	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR CCA FILTERED.	
Sample Analysis	CCA + CCR	Sample Time	13:06	
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)
12:51	34.05	7.82	13.9	1.224	8.02	216.4	2.86
12:54	34.06	7.56	13.6	1.399	6.97	235.8	2.78
12:57	34.05	7.42	13.5	1.486	6.61	246.3	2.62
13:00	34.05	7.35	13.4	1.566	6.45	253.9	2.23
13:03	34.05	7.31	13.5	1.593	6.39	259.6	2.11
13:06	34.05	7.30	13.5	1.601	6.38	261.6	2.17
—							

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

PROJECT NAME	NRG - JOLIET #29 STATION (12313.0)		DATE	4-30-25
Sample Name	MW-10	Start Time	14:18	
Condition of Well	Good			
Water Level	34.24	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	COLORLESS ODORLESS	
Volume Removed	2.25 Gals.	W L at Sample Time	34.24	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CREAM CCA FILTERED.	
Sample Analysis	CCA + CCR	Sample Time	14:33	
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)
14:21	34.25	7.50	13.0	1.385	8.15	223.9	5.67
14:24	34.25	7.34	12.9	1.384	7.75	237.8	3.62
14:27	34.24	7.30	12.8	1.384	7.56	246.5	7.24
14:30	34.24	7.28	12.8	1.384	7.41	254.2	8.46
14:33	34.24	7.27	12.8	1.384	7.37	257.6	9.43
—							

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

