

## **DATA SUMMARY POSTING**

Station: Midwest Generation Will County Generating Station

Regulated Unit(s):   Pond 1N (IEPA ID No. W1978100011-01)  
                          Pond 1S (IEPA ID No. W1978100011-02)

In accordance with the new Ill. Adm. Code Title 35, Part 845: Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments (State CCR Rule) groundwater monitoring was completed during the 3<sup>rd</sup> quarter 2022 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. In addition, Table 2 provides a summary of turbidity data which was collected as part of State CCR Rule requirements.

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 for Ponds 1N and 1S dated March 31, 2022. 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, Will County Station, Romeoville, IL, Ponds 1N and 1S.

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 Combined	Selenium	Thallium
MW-01 up gradient	5/3/2021	2.6	170	F1 21	0.62	6.83	390	1200	< 0.003	< 0.001	0.095	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.034	< 0.0002	0.012	0.623	0.0093	< 0.002
	5/24/2021	2.5	200	18	0.63	6.86	350	1100	< 0.003	< 0.001	0.093	^1+ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.036	< 0.0002	F1 < 0.012	0.953	0.012	< 0.002
	6/7/2021	3.0	200	18	0.63	6.52	380	510	< 0.003	< 0.001	0.096	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.037	< 0.0002	0.013	< 0.372	0.01	< 0.002
	6/25/2021	B 2.6	200	20	0.59	6.64	410	1200	^+ < 0.003	< 0.001	0.097	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.037	< 0.0002	0.014	0.672	0.0042	< 0.002
	7/12/2021	2.4	190	16	0.60	6.55	320	1000	< 0.003	0.0012	0.100	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.045	< 0.0002	0.013	0.457	0.012	< 0.002
	8/2/2021	2.4	200	18	0.65	6.57	410	1300	< 0.003	0.001	0.100	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.044	< 0.0002	0.014	0.478	0.0095	< 0.002
	8/23/2021	2.4	200	18	0.61	6.99	400	1100	< 0.003	< 0.001	0.100	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.044	< 0.0002	0.014	0.697	0.0058	< 0.002
	11/19/2021	2	170	29	0.56	6.62	260	970	< 0.003	< 0.001	0.090	^1+ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.038	< 0.0002	0.0098	1.16	0.017	< 0.002
	2/21/2022	2	190	26	0.55	6.63	370	1200	< 0.003	< 0.001	0.086	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.032	< 0.0002	0.011	0.773	0.0079	< 0.002
	6/15/2022	2.6	180	33	0.61	6.43	350	1100	< 0.003	< 0.001	0.09	< 0.001	0.00054	< 0.005	< 0.001	< 0.0005	0.033	< 0.0002	0.015	0.945	0.0087	< 0.002
8/24/2022	2.7	180	24	0.61	6.51	370	1400	< 0.003	< 0.001	0.093	< 0.001	^1+ 0.00092	< 0.005	0.0016	0.00078	0.038	< 0.0002	0.015	0.581	0.0047	< 0.002	
MW-02 up gradient	5/3/2021	5.3	87	28	0.41	7.76	500	1100	< 0.003	0.009	0.058	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.046	< 0.0002	0.072	1.3	< 0.0025	< 0.002
	5/24/2021	5.2	88	24	0.41	7.77	550	1100	< 0.003	0.0099	0.059	^1+ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.047	< 0.0002	0.07	1.19	< 0.0025	< 0.002
	6/7/2021	6.5	100	25	0.4	7.60	540	1100	< 0.003	0.011	0.057	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.045	< 0.0002	0.081	0.54	< 0.0025	< 0.002
	6/28/2021	B 5.3	95	23	0.36	7.93	500	1200	^+ < 0.003	0.012	0.059	< 0.001	< 0.0005	0.0057	< 0.001	< 0.0005	0.046	< 0.0002	0.075	0.8	< 0.0025	< 0.002
	7/12/2021	5.2	97	21	0.37	7.53	480	970	< 0.003	0.012	0.067	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.051	< 0.0002	0.071	1.07	< 0.0025	< 0.002
	8/2/2021	4.8	92	24	0.37	7.54	520	1200	< 0.003	0.011	0.06	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.048	< 0.0002	0.073	0.798	< 0.0025	< 0.002
	8/23/2021	5.0	92	26	0.38	8.02	530	830	< 0.003	0.011	0.06	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.048	< 0.0002	0.075	0.986	< 0.0025	< 0.002
	11/19/2021	5.2	86	27	0.38	7.72	520	1100	< 0.003	0.014	0.057	^1+ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.041	< 0.0002	0.068	1.43	< 0.0025	< 0.002
	2/21/2022	4.9	92	32	0.43	7.65	550	1100	< 0.003	0.01	0.06	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.044	< 0.0002	0.083	< 0.848	< 0.0025	< 0.002
	6/15/2022	5.3	91	30	0.39	7.32	460	1100	< 0.003	0.01	0.058	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.044	< 0.0002	0.073	1.17	< 0.0025	< 0.002
8/24/2022	5.6	81	28	0.38	7.73	480	1100	< 0.003	0.015	0.059	< 0.001	< ^1+ 0.0005	< 0.005	< 0.001	< 0.0005	0.043	< 0.0002	0.07	0.984	< 0.0025	< 0.002	
MW-03 up gradient	5/3/2021	3.3	140	18	0.31	6.90	240	890	< 0.003	0.0011	0.11	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.04	< 0.0002	0.017	0.993	< 0.0025	< 0.002
	5/24/2021	3.2	120	19	0.34	6.91	270	900	< 0.003	0.001	0.001	^1+ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.038	< 0.0002	0.018	0.922	0.0057	< 0.002
	6/8/2021	3.7	140	21	0.32	6.75	290	940	< 0.003	0.0014	0.1	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.041	< 0.0002	0.017	0.857	< 0.0025	< 0.002
	6/28/2021	B 3.6	120	23	0.32	7.17	290	930	^+ < 0.003	0.0023	0.091	< 0.001	< 0.0005	< 0.005	0.001	< 0.0005	0.044	< 0.0002	0.022	1.03	< 0.0025	< 0.002
	7/12/2021	3.8	120	27	0.33	6.88	270	870	< 0.003	0.0033	0.1	< 0.001	0.00053	< 0.005	< 0.001	< 0.0005	0.048	< 0.0002	0.028	1.97	< 0.0025	< 0.002
	8/2/2021	6.2	120	31	0.3	6.86	280	920	< 0.003	0.0053	0.096	< 0.001	< 0.0005	< 0.005	0.001	< 0.0005	0.043	< 0.0002	0.021	1.16	< 0.0025	< 0.002
	8/24/2021	3.3	120	F1 F2 50	0.35	7.28	300	890	< 0.003	0.0021	0.091	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.042	< 0.0002	0.022	0.763	< 0.0025	< 0.002
	11/19/2021	3.7	160	27	0.32	6.67	330	970	< 0.003	0.0016	0.12	^1+ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.039	< 0.0002	0.025	2.47	0.0082	< 0.002
	2/24/2022	2.6	220	18	0.3	6.53	360	1200	< 0.003	0.0015	0.12	< ^1+ 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.032	< 0.0002	0.014	1.11	0.046	< 0.002
	6/16/2022	4	140	18	0.31	6.62	300	910	< 0.003	0.0014	0.1	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.045	< 0.0002	0.022	1.38	< 0.0025	< 0.002
8/24/2022	3.4	140	35	0.34	6.73	360	1200	< 0.003	< 0.001	0.096	< 0.001	< ^1+ 0.0005	< 0.005	0.001	< 0.0005	0.035	< 0.0002	0.018	1.24	< 0.0025	< 0.002	
MW-04 up gradient	5/3/2021	5.1	310	28	0.36	6.76	910	2000	< 0.003	0.003	0.046	< 0.001	< 0.0005	< 0.005	0.0019	< 0.0005	0.026	< 0.0002	0.026	1.16	< 0.0025	< 0.002
	5/24/2021	5.5	340	24	0.38	6.90	950	2000	< 0.003	0.0039	0.047	^1+ < 0.001	< 0.0005	< 0.005	0.0016	< 0.0005	0.027	< 0.0002	0.028	1.72	0.0051	< 0.002
	6/8/2021	5.7	310	24	0.37	6.58	910	2000	< 0.003	0.0026	0.043	< 0.001	< 0.0005	< 0.005	0.0016	< 0.0005	0.027	< 0.0002	0.028	< 0.459	0.0076	< 0.002
	6/28/2021	B 5.6	330	20	0.35	6.95	930	2100	^+ < 0.003	0.011	0.047	< 0.001	< 0.0005	< 0.005	0.0016	< 0.0005	0.025	< 0.0002	0.027	1.12	0.019	< 0.002
	7/12/2021	5.9	320	16	0.38	6.70	970	2100	< 0.003	0.01	0.049	< 0.001	< 0.0005	< 0.005	0.0016	< 0.0005	0.03	< 0.0002	0.033	1.68	0.0056	< 0.002
	8/2/2021	5.3	310	21	0.38	6.71	1000	2200	< 0.003	0.0039	0.046	< 0.001	< 0.0005	< 0.005	0.0018	< 0.0005	0.027	< 0.0002	0.032	1.18	< 0.0025	< 0.002
	8/24/2021	6.2	320	90	0.40	7.09	1100	1700	< 0.003	0.0075	0.046	< 0.001	< 0.0005	< 0.005	0.002	< 0.0005	0.028	< 0.0002	0.035	< 0.642	< 0.0025	< 0.002
	11/19/2021	6.1	300	23	0.36	6.69	840	1900	< 0.003	0.0063	0.044	^1+ < 0.001	< 0.0005	< 0.005	0.0022	< 0.0005	0.022	< 0.0002	0.023	1.17	< 0.0025	< 0.002
	2/24/2022	4.7	350	16	0.37	6.5	950	2100	< 0.003	0.02	0.039	< ^1+ 0.001	< 0.0005	< 0.005	0.0017	< 0.0005	0.02	< 0.0002	0.028	< 0.424	0.09	< 0.002
	6/16/2022	5.5	310	22	0.37	6.55	990	2200	< 0.003	0.003	0.045	< 0.001	< 0.0005	< 0.005	0.0021	< 0.0005	0.023	< 0.0002	0.026	1.39	0.0044	< 0.002
8/24/2022	5.8	280	18	0.4	6.57	810	2000	< 0.003	0.0053	0.044	< 0.001	< ^1+ 0.0005	< 0.005	0.003	< 0.0005	0.019	< 0.0002	0.021	1.41	0.003	< 0.002	
MW-07 down gradient	5/4/2021	4.0	130	110	0.69	8.29	490	1000														

Table 1. Groundwater Analytical Results-Midwest Generation, LLC, Will County Station, Romeoville, IL. Ponds 1N and 1S.

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 Combined	Selenium	Thallium	
MW-08 down gradient	5/4/2021	2.6	190	290	0.51	6.95	490	1900	< 0.003	0.0073	0.081	< 0.001	< 0.0005	< 0.005	0.0015	< 0.0005	0.015	< 0.0002	0.047	0.873	< 0.0025	< 0.002	
	5/25/2021	2.8	170	290	0.51	6.90	540	1600	< 0.003	0.0074	0.083	^1+ < 0.001	< 0.0005	< 0.005	0.001	< 0.0005	0.016	< 0.0002	0.044	1.06	< 0.0025	< 0.002	
	6/7/2021	4.2	170	120	0.59	7.24	650	1400	< 0.003	0.01	0.067	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.021	< 0.0002	0.091	0.768	< 0.0025	< 0.002	
	6/28/2021	B 3.0	160	190	0.53	7.17	480	1400	^+ < 0.003	0.014	0.083	< 0.001	< 0.0005	< 0.005	< 0.001	0.0011	0.019	< 0.0002	0.066	0.621	< 0.0025	< 0.002	
	7/12/2021	7.0	200	260	0.5	6.64	530	1600	< 0.003	0.013	0.17	^+ < 0.001	< 0.0005	< 0.005	0.0012	< 0.0005	0.022	< 0.0002	0.07	0.841	< 0.0025	< 0.002	
	8/2/2021	3.1	160	180	0.53	6.87	530	1400	< 0.003	0.012	0.074	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.021	< 0.0002	0.076	0.533	< 0.0025	< 0.002	
	8/25/2021	3.0	130	150	0.61	7.45	500	1100	< 0.003	0.011	0.068	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.021	< 0.0002	0.084	0.888	< 0.0025	< 0.002	
	11/19/2021	3.3	200	310	0.5	6.66	630	1900	< 0.003	0.0094	0.065	^1+ < 0.001	< 0.0005	< 0.005	0.0014	< 0.0005	0.013	< 0.0002	0.043	1.69	< 0.0025	< 0.002	
	2/24/2022	1.6	170	210	0.52	6.84	270	1200	< 0.003	0.006	0.061	< ^1+ 0.001	< 0.0005	< 0.005	< 0.001	0.00068	0.0088	< 0.0002	0.026	< 0.645	0.048	< 0.002	
6/15/2022	2.9	150	170	0.59	6.66	480	1300	< 0.003	0.0048	0.075	< 0.001	< 0.0005	< 0.005	0.0016	< 0.0005	0.014	< 0.0002	0.064	1.39	< 0.0025	< 0.002		
8/25/2022	3	120	140	0.75	6.95	480	1200	< 0.003	0.0062	0.059	< 0.001	^1+ 0.0012	< 0.005	< 0.001	< 0.0005	0.019	< 0.0002	0.085	1.23	< 0.0025	< 0.002		
MW-09 down gradient	11/11/2015	1.9	56	190	0.55	9.12	460	750	< 0.003	0.0047	0.027	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.14	-0.2208	< 0.0025	< 0.002	
	2/17/2016	1.8	47	160	0.55	9.10	250	600	< 0.003	0.0051	0.027	^+ < 0.001	< 0.0005	< 0.005	< 0.001	0.00065	< 0.01	< 0.0002	0.089	< 0.373	< 0.0025	< 0.002	
	5/24/2016	1.6	48	180	0.51	8.79	240	640	< 0.003	0.0043	0.027	^+ < 0.001	< 0.0005	< 0.005	< 0.001	0.00071	< 0.01	< 0.0002	0.079	0.508	< 0.0025	< 0.002	
	8/9/2016	2.2	53	140	0.48	8.35	280	750	< 0.003	0.0052	0.031	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.14	0.639	< 0.0025	< 0.002	
	10/26/2016	2.2	33	130	0.81	9.16	230	660	< 0.003	0.0069	0.019	< 0.001	< 0.0005	< 0.005	< 0.0010	< 0.0005	< 0.01	< 0.0002	0.11	0.608	< 0.0025	< 0.002	
	1/31/2017	2.0	61	250	0.57	8.59	180	710	< 0.003	0.0063	0.038	* < 0.001	< 0.0005	< 0.005	< 0.0010	0.0014	< 0.01	^+ < 0.0002	0.09	< 0.45	< 0.0025	< 0.002	
	5/9/2017	1.8	66	340	0.38	8.58	250	900	< 0.003	0.0052	0.038	< 0.001	< 0.0005	< 0.005	< 0.0010	0.00054	< 0.01	< 0.0002	0.093	< 0.361	< 0.0025	< 0.002	
	6/27/2017	1.9	64	330	0.51	7.76	240	940	< 0.003	0.0046	0.039	< 0.001	< 0.0005	< 0.005	< 0.0010	< 0.0005	< 0.01	< 0.0002	0.091	0.638	< 0.0025	< 0.002	
	9/6/2017	1.8	59	310	0.51	8.98	240	890	< 0.003	0.0047	0.038	< 0.001	< 0.0005	< 0.005	< 0.0010	< 0.0005	< 0.01	< 0.0002	0.1	0.454	< 0.0025	< 0.002	
	11/14/2017	2.6	160	270	0.51	8.10	290	910	< 0.003	0.0017	0.11	< 0.001	< 0.0005	< 0.005	< 0.0010	< 0.0005	0.018	< 0.0002	0.026	< 0.372	0.061	< 0.002	
	5/1/2018	1.7	49	200	0.52	7.81	430	820	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/25/2018 R	NA	NA	NA	NA	NA	NA	320	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/2/2018	2.1	49	170	0.55	8.09	270	820	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/29/2019	1.5	48	280	0.29	8.90	150	750	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/6/2019	2.0	38	140	0.46	8.65	160	630	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/26/2020	1.3	55	320	0.32	8.66	140	720	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/3/2020	2.0	43	240	0.55	8.64	180	750	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/26/2021	1.6	67	360	0.39	8.74	180	900	< 0.003	0.0044	0.054	^1+ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.054	0.741	< 0.0025	< 0.002	
	8/25/2021	1.9	60	360	0.43	9.06	210	800	< 0.003	0.0065	0.049	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.067	< 0.444	< 0.0025	< 0.002	
	11/23/2021	1.1	30	290	0.47	8.73	210	900	< 0.003	0.0046	0.024	^1+ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.037	0.789	< 0.0025	< 0.002	
2/22/2022	1.5	49	250	0.4	8.65	160	900	< 0.003	0.007	0.037	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.0065	< 0.0002	0.051	< 0.409	< 0.0025	< 0.002		
6/15/2022	1.9	43	230	0.48	8.35	180	730	< 0.003	0.0071	0.036	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.057	< 0.39	< 0.0025	< 0.002		
8/25/2022	2.1	38	210	0.58	8.68	190	770	< 0.003	0.0089	0.034	< 0.001	< ^1+ 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.065	< 0.39	< 0.0025	< 0.002		
MW-13 down gradient	5/4/2021	1.7	150	210	0.29	7.54	280	1100	< 0.003	0.0011	0.14	< 0.001	< 0.0005	< 0.005	< 0.001	0.00054	0.013	< 0.0002	0.025	1.02	0.0032	< 0.002	
	5/26/2021	1.8	150	220	0.32	7.47	280	1100	< 0.003	0.001	0.13	^1+ < 0.001	< 0.0005	< 0.005	< 0.001	0.00052	< 0.01	< 0.0002	0.016	0.724	0.0025	< 0.002	
	6/7/2021	2.2	180	250	0.33	7.19	270	1200	< 0.003	0.0021	0.13	< 0.001	< 0.0005	< 0.005	0.0013	0.0014	< 0.01	< 0.0002	0.018	1.07	0.0027	< 0.002	
	6/28/2021	0.68	110	160	0.37	7.56	120	840	^+ < 0.003	< 0.001	0.082	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.016	< 0.0002	0.018	0.461	0.0072	< 0.002	
	7/12/2021	1.6	150	240	0.33	7.17	220	1200	< 0.003	0.0015	0.13	^+ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.017	< 0.0002	0.014	1.08	0.009	< 0.002	
	8/2/2021	1.6	170	240	0.32	7.10	240	1200	< 0.003	0.0019	0.13	< 0.001	< 0.0005	< 0.005	< 0.001	0.00055	< 0.01	< 0.0002	0.013	0.523	0.0061	< 0.002	
	8/26/2021	2.0	180	260	0.34	7.49	250	980	< 0.003	0.0051	0.16	< 0.001	< 0.0005	0.0072	0.0035	0.0047	0.012	< 0.0002	0.015	< 0.744	< 0.0025	< 0.002	
	11/23/2021	1.8	170	230	0.33	7.03	300	1200	< 0.003	0.0011	0.11	^+ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.012	1.49	0.0082	< 0.002	
	2/23/2022	0.3	75	95	0.34	7.25	66	590	< 0.003	< 0.001	0.054	< ^1+ 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.0066	< 0.0002	0.0089	< 0.613	0.0054	< 0.002	
6/14/2022	2.1	500	^+ 200	0.37	6.68	210	940	< 0.003	0.046	0.43	< 0.005	0.0022	0.077	0.041	0.063	< 0.05	< 0.0002	0.026	1.59	0.0097	< 0.002		
8/23/2022	1.2	120	180	0.39	6.92	210	1100	< 0.003	0.0012	0.11	< 0.001	< ^1+ 0.0005	< 0.005	< 0.001	0.0014	0.01	< 0.0002	0.013	< 0.954	0.0099	< 0.002		
MW-14 down gradient	5/4/2021	4.8	130	110	0.44	8.03	490	1100	< 0.003	0.0035	0.097	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.046	< 0.0002	0.053	< 0.453	< 0.0025	< 0.002	
	5/25/20																						

Table 2. Groundwater Turbidity - Ponds 1N and 1S, Midwest Generation, LLC, Will County Generating Station, Romeoville, IL.

Well ID	Date	Turbidity (NTU)
MW-01	2/23/2021	0.64
	4/10/2021	5.81
	4/25/2021	7.69
	5/3/2021	1.74
	5/24/2021	1.83
	6/7/2021	2.32
	6/25/2021	3.50
	7/12/2021	4.18
	8/2/2021	2.87
	8/23/2021	1.17
	9/24/2021	3.25
	11/19/2021	16.82
	2/21/2022	3.04
6/15/2022	10.56	
8/24/2022	15.3	
MW-02	2/25/2021	8.84
	4/10/2021	9.17
	4/25/2021	12.03
	5/3/2021	2.42
	5/24/2021	2.7
	6/7/2021	1.82
	6/28/2021	3.15
	7/12/2021	4.23
	8/2/2021	3.11
	8/23/2021	1.37
	9/24/2021	4.63
	11/19/2021	2.1
	2/21/2022	0.45
6/15/2022	2.69	
8/24/2022	8.71	
MW-03	3/1/2021	0.0
	4/10/2021	1.45
	4/25/2021	3.41
	5/3/2021	1.61
	5/24/2021	2.06
	6/8/2021	2.34
	6/28/2021	2.69
	7/12/2021	4.07
	8/2/2021	1.98
	8/24/2021	5.1
	9/24/2021	4.18
	11/19/2021	0.47
	2/24/2022	-1.1
6/16/2022	1.7	
8/24/2022	6.39	
MW-04	2/22/2021	9.87
	4/10/2021	42.2
	4/25/2021	7.41
	5/3/2021	4.2
	5/24/2021	4.45
	6/8/2021	2.8
	6/28/2021	12.93
	7/12/2021	3.93
	8/2/2021	3.75
	8/24/2021	10.1
	9/24/2021	5.74
	11/19/2021	15.15
	2/24/2022	2.04
6/16/2022	3.13	
8/24/2022	4.7	
MW-07	3/1/2021	6.11
	4/10/2021	6.19
	4/25/2021	6.98
	5/4/2021	37.65
	5/24/2021	2.54
	6/7/2021	6.21
	6/25/2021	6.02
	7/12/2021	5.13
	8/2/2021	2.45
	8/25/2021	7.7
	9/24/2021	4.13
	11/19/2021	7.35
	2/22/2022	-0.02
6/15/2022	5.58	
8/25/2022	2.27	

Table 2. Groundwater Turbidity - Ponds 1N and 1S, Midwest Generation, LLC, Will County Generating Station, Romeoville, IL.

Well ID	Date	Turbidity (NTU)
MW-08	3/1/2021	2.3
	4/10/2021	270.98
	4/25/2021	26.73
	5/4/2021	6.6
	5/28/2021	6.51
	6/7/2021	4.58
	6/28/2021	5.67
	7/12/2021	6.71
	8/2/2021	14.15
	8/25/2021	8.9
	9/24/2021	7.21
	11/19/2021	2.34
	2/24/2022	40.05
MW-09	6/15/2022	5.01
	8/25/2022	9.02
	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	
MW-13	5/4/2021	20.6
	5/25/2021	9.8
	6/7/2021	6.49
	6/28/2021	8.25
	7/12/2021	5.89
	8/2/2021	2.91
	8/26/2021	12.9
	9/24/2021	9.13
	11/23/2021	17.83
	2/23/2022	34.33
MW-14	6/14/2022	81.91
	8/23/2022	47.3
	5/4/2021	6.88
	5/25/2021	3.5
	6/7/2021	2.55
	6/28/2021	7.44
	7/12/2021	4.89
	8/2/2021	9.8
	8/25/2021	11.7
	9/24/2021	6.87
MW-15	11/19/2021	5.19
	2/23/2022	45.11
	6/14/2022	3.98
	8/23/2022	2.71
	5/4/2021	28.65
	5/25/2021	8.89
	6/7/2021	8.82
	6/28/2021	6.48
	7/12/2021	8.52
	8/2/2021	22.71
8/25/2021	12.4	
9/24/2021	11.44	
11/19/2021	10.83	
2/22/2022	17.05	
6/14/2022	11.83	
8/23/2022	33.2	

## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

Laboratory Job ID: 500-221301-1  
Client Project/Site: Will County CCR

For:  
Midwest Generation EME LLC  
1800 Channahon Road  
Joliet, Illinois 60436

Attn: John Niedzwiecki



Authorized for release by:  
9/23/2022 8:23:06 AM

Diana Mockler, Project Manager I  
(219)252-7570

[Diana.Mockler@et.eurofinsus.com](mailto:Diana.Mockler@et.eurofinsus.com)

### LINKS

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results through



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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# Case Narrative

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

Job ID: 500-221301-1

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**Job ID: 500-221301-1**

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**Laboratory: Eurofins Chicago**

## Narrative

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### Job Narrative 500-221301-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/24/2022 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 4 coolers at receipt time were 1.1° C, 1.1° C, 2.8° C and 3.4° C.

#### Metals

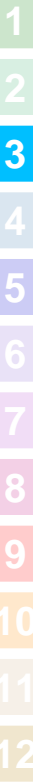
Method 6020A: The initial calibration verification low level (ICVL) result for batch 500-672787 was above the upper control limit for Cadmium. The samples were bracketed by CCVL that were within control limits and have been reported as qualified data.

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

#### General Chemistry

Methods 9038, SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 500-671776 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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





# Method Summary

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

Job ID: 500-221301-1

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

#### Protocol References:

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

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

#### Laboratory References:

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

# Sample Summary

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

Job ID: 500-221301-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-221301-1	MW-01	Water	08/24/22 09:10	08/24/22 16:30
500-221301-2	MW-02	Water	08/24/22 10:42	08/24/22 16:30
500-221301-3	MW-03	Water	08/24/22 12:18	08/24/22 16:30
500-221301-4	MW-04	Water	08/24/22 13:26	08/24/22 16:30
500-221301-5	MW-13	Water	08/24/22 14:00	08/24/22 16:30
500-221301-6	MW-14	Water	08/24/22 12:52	08/24/22 16:30
500-221301-7	MW-15	Water	08/24/22 11:57	08/24/22 16:30
500-221301-8	DUPLICATE	Water	08/24/22 00:00	08/24/22 16:30
500-221301-9	MW-07	Water	08/25/22 11:28	08/26/22 09:40
500-221301-10	MW-08	Water	08/25/22 12:42	08/26/22 09:40

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

# Client Sample Results

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

Job ID: 500-221301-1

**Client Sample ID: MW-01**

**Lab Sample ID: 500-221301-1**

Date Collected: 08/24/22 09:10

Matrix: Water

Date Received: 08/24/22 16:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/31/22 08:26	08/31/22 21:01	1
Arsenic	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:01	1
<b>Barium</b>	<b>0.093</b>		0.0025		mg/L		08/31/22 08:26	08/31/22 21:01	1
Beryllium	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:01	1
<b>Boron</b>	<b>2.7</b>		0.50		mg/L		08/31/22 08:26	09/01/22 14:45	10
<b>Cadmium</b>	<b>0.00092</b>	<b>^1+</b>	0.00050		mg/L		08/31/22 08:26	08/31/22 21:01	1
<b>Calcium</b>	<b>180</b>		0.20		mg/L		08/31/22 08:26	08/31/22 21:01	1
Chromium	<0.0050		0.0050		mg/L		08/31/22 08:26	08/31/22 21:01	1
<b>Cobalt</b>	<b>0.0016</b>		0.0010		mg/L		08/31/22 08:26	08/31/22 21:01	1
<b>Lead</b>	<b>0.00078</b>		0.00050		mg/L		08/31/22 08:26	08/31/22 21:01	1
<b>Lithium</b>	<b>0.038</b>		0.010		mg/L		08/31/22 08:26	08/31/22 21:01	1
<b>Molybdenum</b>	<b>0.015</b>		0.0050		mg/L		08/31/22 08:26	08/31/22 21:01	1
<b>Selenium</b>	<b>0.0047</b>		0.0025		mg/L		08/31/22 08:26	08/31/22 21:01	1
Thallium	<0.0020		0.0020		mg/L		08/31/22 08:26	08/31/22 21:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/31/22 10:00	09/01/22 07:41	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>1400</b>		10		mg/L			08/31/22 15:46	1
<b>Chloride</b>	<b>24</b>		2.0		mg/L			08/25/22 14:39	1
<b>Fluoride</b>	<b>0.61</b>		0.10		mg/L			09/02/22 13:30	1
<b>Sulfate</b>	<b>370</b>		100		mg/L			08/25/22 15:35	20

# Client Sample Results

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

Job ID: 500-221301-1

**Client Sample ID: MW-02**

**Lab Sample ID: 500-221301-2**

Date Collected: 08/24/22 10:42

Matrix: Water

Date Received: 08/24/22 16:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/31/22 08:26	08/31/22 21:18	1
<b>Arsenic</b>	<b>0.015</b>		0.0010		mg/L		08/31/22 08:26	08/31/22 21:18	1
<b>Barium</b>	<b>0.059</b>		0.0025		mg/L		08/31/22 08:26	08/31/22 21:18	1
Beryllium	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:18	1
<b>Boron</b>	<b>5.6</b>		1.0		mg/L		08/31/22 08:26	09/01/22 15:02	20
Cadmium	<0.00050	^1+	0.00050		mg/L		08/31/22 08:26	08/31/22 21:18	1
<b>Calcium</b>	<b>81</b>		0.20		mg/L		08/31/22 08:26	08/31/22 21:18	1
Chromium	<0.0050		0.0050		mg/L		08/31/22 08:26	08/31/22 21:18	1
Cobalt	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:18	1
Lead	<0.00050		0.00050		mg/L		08/31/22 08:26	08/31/22 21:18	1
<b>Lithium</b>	<b>0.043</b>		0.010		mg/L		08/31/22 08:26	08/31/22 21:18	1
<b>Molybdenum</b>	<b>0.070</b>		0.0050		mg/L		08/31/22 08:26	08/31/22 21:18	1
Selenium	<0.0025		0.0025		mg/L		08/31/22 08:26	08/31/22 21:18	1
Thallium	<0.0020		0.0020		mg/L		08/31/22 08:26	08/31/22 21:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/31/22 10:00	09/01/22 08:56	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>1100</b>		10		mg/L			08/31/22 15:48	1
<b>Chloride</b>	<b>28</b>		2.0		mg/L			08/25/22 14:39	1
<b>Fluoride</b>	<b>0.38</b>		0.10		mg/L			09/02/22 13:32	1
<b>Sulfate</b>	<b>480</b>		100		mg/L			08/25/22 15:36	20

# Client Sample Results

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

Job ID: 500-221301-1

**Client Sample ID: MW-03**  
**Date Collected: 08/24/22 12:18**  
**Date Received: 08/24/22 16:30**

**Lab Sample ID: 500-221301-3**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/31/22 08:26	08/31/22 21:21	1
Arsenic	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:21	1
<b>Barium</b>	<b>0.096</b>		0.0025		mg/L		08/31/22 08:26	08/31/22 21:21	1
Beryllium	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:21	1
<b>Boron</b>	<b>3.4</b>		0.50		mg/L		08/31/22 08:26	09/01/22 15:05	10
Cadmium	<0.00050	^1+	0.00050		mg/L		08/31/22 08:26	08/31/22 21:21	1
<b>Calcium</b>	<b>140</b>		0.20		mg/L		08/31/22 08:26	08/31/22 21:21	1
Chromium	<0.0050		0.0050		mg/L		08/31/22 08:26	08/31/22 21:21	1
<b>Cobalt</b>	<b>0.0010</b>		0.0010		mg/L		08/31/22 08:26	08/31/22 21:21	1
Lead	<0.00050		0.00050		mg/L		08/31/22 08:26	08/31/22 21:21	1
<b>Lithium</b>	<b>0.035</b>		0.010		mg/L		08/31/22 08:26	08/31/22 21:21	1
<b>Molybdenum</b>	<b>0.018</b>		0.0050		mg/L		08/31/22 08:26	08/31/22 21:21	1
Selenium	<0.0025		0.0025		mg/L		08/31/22 08:26	08/31/22 21:21	1
Thallium	<0.0020		0.0020		mg/L		08/31/22 08:26	08/31/22 21:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/31/22 10:00	09/01/22 08:58	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>1200</b>		10		mg/L			08/31/22 15:49	1
<b>Chloride</b>	<b>35</b>		2.0		mg/L			08/25/22 14:39	1
<b>Fluoride</b>	<b>0.34</b>		0.10		mg/L			09/02/22 13:35	1
<b>Sulfate</b>	<b>360</b>		100		mg/L			08/25/22 15:36	20

# Client Sample Results

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

Job ID: 500-221301-1

**Client Sample ID: MW-04**  
**Date Collected: 08/24/22 13:26**  
**Date Received: 08/24/22 16:30**

**Lab Sample ID: 500-221301-4**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/31/22 08:26	08/31/22 21:25	1
<b>Arsenic</b>	<b>0.0053</b>		0.0010		mg/L		08/31/22 08:26	08/31/22 21:25	1
<b>Barium</b>	<b>0.044</b>		0.0025		mg/L		08/31/22 08:26	08/31/22 21:25	1
Beryllium	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:25	1
<b>Boron</b>	<b>5.8</b>		1.0		mg/L		08/31/22 08:26	09/01/22 15:09	20
Cadmium	<0.00050	^1+	0.00050		mg/L		08/31/22 08:26	08/31/22 21:25	1
<b>Calcium</b>	<b>280</b>		4.0		mg/L		08/31/22 08:26	09/01/22 15:09	20
Chromium	<0.0050		0.0050		mg/L		08/31/22 08:26	08/31/22 21:25	1
<b>Cobalt</b>	<b>0.0030</b>		0.0010		mg/L		08/31/22 08:26	08/31/22 21:25	1
Lead	<0.00050		0.00050		mg/L		08/31/22 08:26	08/31/22 21:25	1
<b>Lithium</b>	<b>0.019</b>		0.010		mg/L		08/31/22 08:26	08/31/22 21:25	1
<b>Molybdenum</b>	<b>0.021</b>		0.0050		mg/L		08/31/22 08:26	08/31/22 21:25	1
<b>Selenium</b>	<b>0.0030</b>		0.0025		mg/L		08/31/22 08:26	08/31/22 21:25	1
Thallium	<0.0020		0.0020		mg/L		08/31/22 08:26	08/31/22 21:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/31/22 10:00	09/01/22 09:21	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>2000</b>		10		mg/L			08/31/22 15:52	1
<b>Chloride</b>	<b>18</b>		2.0		mg/L			08/25/22 14:39	1
<b>Fluoride</b>	<b>0.40</b>		0.10		mg/L			09/02/22 13:37	1
<b>Sulfate</b>	<b>810</b>		250		mg/L			08/25/22 15:37	50

# Client Sample Results

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

Job ID: 500-221301-1

**Client Sample ID: MW-13**  
**Date Collected: 08/24/22 14:00**  
**Date Received: 08/24/22 16:30**

**Lab Sample ID: 500-221301-5**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/31/22 08:26	08/31/22 21:35	1
<b>Arsenic</b>	<b>0.0012</b>		0.0010		mg/L		08/31/22 08:26	08/31/22 21:35	1
<b>Barium</b>	<b>0.11</b>		0.0025		mg/L		08/31/22 08:26	08/31/22 21:35	1
Beryllium	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:35	1
<b>Boron</b>	<b>1.2</b>		0.25		mg/L		08/31/22 08:26	09/01/22 15:19	5
Cadmium	<0.00050	^1+	0.00050		mg/L		08/31/22 08:26	08/31/22 21:35	1
<b>Calcium</b>	<b>120</b>		0.20		mg/L		08/31/22 08:26	08/31/22 21:35	1
Chromium	<0.0050		0.0050		mg/L		08/31/22 08:26	08/31/22 21:35	1
Cobalt	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:35	1
<b>Lead</b>	<b>0.0014</b>		0.00050		mg/L		08/31/22 08:26	08/31/22 21:35	1
<b>Lithium</b>	<b>0.010</b>		0.010		mg/L		08/31/22 08:26	08/31/22 21:35	1
<b>Molybdenum</b>	<b>0.013</b>		0.0050		mg/L		08/31/22 08:26	08/31/22 21:35	1
<b>Selenium</b>	<b>0.0099</b>		0.0025		mg/L		08/31/22 08:26	08/31/22 21:35	1
Thallium	<0.0020		0.0020		mg/L		08/31/22 08:26	08/31/22 21:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/31/22 10:00	09/01/22 09:23	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>1100</b>		10		mg/L			08/31/22 15:54	1
<b>Chloride</b>	<b>180</b>		20		mg/L			08/25/22 14:40	10
<b>Fluoride</b>	<b>0.39</b>		0.10		mg/L			09/02/22 13:40	1
<b>Sulfate</b>	<b>210</b>		50		mg/L			08/25/22 16:01	10

# Client Sample Results

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

Job ID: 500-221301-1

**Client Sample ID: MW-14**

**Lab Sample ID: 500-221301-6**

Date Collected: 08/24/22 12:52

Matrix: Water

Date Received: 08/24/22 16:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/31/22 08:26	08/31/22 21:39	1
<b>Arsenic</b>	<b>0.0022</b>		0.0010		mg/L		08/31/22 08:26	08/31/22 21:39	1
<b>Barium</b>	<b>0.092</b>		0.0025		mg/L		08/31/22 08:26	08/31/22 21:39	1
Beryllium	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:39	1
<b>Boron</b>	<b>4.1</b>		1.0		mg/L		08/31/22 08:26	09/01/22 15:22	20
Cadmium	<0.00050	^1+	0.00050		mg/L		08/31/22 08:26	08/31/22 21:39	1
<b>Calcium</b>	<b>97</b>		0.20		mg/L		08/31/22 08:26	08/31/22 21:39	1
Chromium	<0.0050		0.0050		mg/L		08/31/22 08:26	08/31/22 21:39	1
Cobalt	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:39	1
Lead	<0.00050		0.00050		mg/L		08/31/22 08:26	08/31/22 21:39	1
<b>Lithium</b>	<b>0.030</b>		0.010		mg/L		08/31/22 08:26	08/31/22 21:39	1
<b>Molybdenum</b>	<b>0.067</b>		0.0050		mg/L		08/31/22 08:26	08/31/22 21:39	1
Selenium	<0.0025		0.0025		mg/L		08/31/22 08:26	08/31/22 21:39	1
Thallium	<0.0020		0.0020		mg/L		08/31/22 08:26	08/31/22 21:39	1

## Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/31/22 10:00	09/01/22 09:25	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>1200</b>		10		mg/L			08/31/22 15:55	1
<b>Chloride</b>	<b>97</b>		20		mg/L			08/25/22 14:40	10
<b>Fluoride</b>	<b>0.57</b>		0.10		mg/L			09/02/22 13:48	1
<b>Sulfate</b>	<b>410</b>		250		mg/L			08/25/22 16:01	50



# Client Sample Results

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

Job ID: 500-221301-1

**Client Sample ID: MW-15**  
**Date Collected: 08/24/22 11:57**  
**Date Received: 08/24/22 16:30**

**Lab Sample ID: 500-221301-7**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/31/22 08:26	08/31/22 21:42	1
<b>Arsenic</b>	<b>0.0047</b>		0.0010		mg/L		08/31/22 08:26	08/31/22 21:42	1
<b>Barium</b>	<b>0.088</b>		0.0025		mg/L		08/31/22 08:26	08/31/22 21:42	1
Beryllium	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:42	1
<b>Boron</b>	<b>3.5</b>		0.50		mg/L		08/31/22 08:26	09/01/22 15:26	10
Cadmium	<0.00050	^1+	0.00050		mg/L		08/31/22 08:26	08/31/22 21:42	1
<b>Calcium</b>	<b>160</b>		0.20		mg/L		08/31/22 08:26	08/31/22 21:42	1
Chromium	<0.0050		0.0050		mg/L		08/31/22 08:26	08/31/22 21:42	1
Cobalt	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:42	1
Lead	<0.00050		0.00050		mg/L		08/31/22 08:26	08/31/22 21:42	1
<b>Lithium</b>	<b>0.018</b>		0.010		mg/L		08/31/22 08:26	08/31/22 21:42	1
<b>Molybdenum</b>	<b>0.030</b>		0.0050		mg/L		08/31/22 08:26	08/31/22 21:42	1
Selenium	<0.0025		0.0025		mg/L		08/31/22 08:26	08/31/22 21:42	1
Thallium	<0.0020		0.0020		mg/L		08/31/22 08:26	08/31/22 21:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/31/22 10:00	09/01/22 09:27	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>1500</b>		10		mg/L			08/31/22 15:57	1
<b>Chloride</b>	<b>110</b>		20		mg/L			08/25/22 14:40	10
<b>Fluoride</b>	<b>0.58</b>		0.10		mg/L			09/02/22 13:51	1
<b>Sulfate</b>	<b>580</b>		250		mg/L			08/25/22 16:02	50

# Client Sample Results

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

Job ID: 500-221301-1

**Client Sample ID: DUPLICATE**

**Lab Sample ID: 500-221301-8**

Date Collected: 08/24/22 00:00

Matrix: Water

Date Received: 08/24/22 16:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/31/22 08:26	08/31/22 21:46	1
<b>Arsenic</b>	<b>0.0014</b>		0.0010		mg/L		08/31/22 08:26	08/31/22 21:46	1
<b>Barium</b>	<b>0.11</b>		0.0025		mg/L		08/31/22 08:26	08/31/22 21:46	1
Beryllium	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:46	1
<b>Boron</b>	<b>1.2</b>		0.25		mg/L		08/31/22 08:26	09/01/22 15:29	5
Cadmium	<0.00050	^1+	0.00050		mg/L		08/31/22 08:26	08/31/22 21:46	1
<b>Calcium</b>	<b>130</b>		0.20		mg/L		08/31/22 08:26	08/31/22 21:46	1
Chromium	<0.0050		0.0050		mg/L		08/31/22 08:26	08/31/22 21:46	1
Cobalt	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:46	1
<b>Lead</b>	<b>0.0015</b>		0.00050		mg/L		08/31/22 08:26	08/31/22 21:46	1
<b>Lithium</b>	<b>0.010</b>		0.010		mg/L		08/31/22 08:26	08/31/22 21:46	1
<b>Molybdenum</b>	<b>0.014</b>		0.0050		mg/L		08/31/22 08:26	08/31/22 21:46	1
<b>Selenium</b>	<b>0.011</b>		0.0025		mg/L		08/31/22 08:26	08/31/22 21:46	1
Thallium	<0.0020		0.0020		mg/L		08/31/22 08:26	08/31/22 21:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/31/22 10:00	09/01/22 09:30	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>970</b>		10		mg/L			08/31/22 15:58	1
<b>Chloride</b>	<b>160</b>		20		mg/L			08/25/22 14:41	10
<b>Fluoride</b>	<b>0.40</b>		0.10		mg/L			09/02/22 13:53	1
<b>Sulfate</b>	<b>75</b>		50		mg/L			08/25/22 16:02	10

# Client Sample Results

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

Job ID: 500-221301-1

**Client Sample ID: MW-07**

**Lab Sample ID: 500-221301-9**

Date Collected: 08/25/22 11:28

Matrix: Water

Date Received: 08/26/22 09:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/31/22 08:26	08/31/22 21:49	1
<b>Arsenic</b>	<b>0.0035</b>		0.0010		mg/L		08/31/22 08:26	08/31/22 21:49	1
<b>Barium</b>	<b>0.052</b>		0.0025		mg/L		08/31/22 08:26	08/31/22 21:49	1
Beryllium	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:49	1
<b>Boron</b>	<b>2.9</b>		0.50		mg/L		08/31/22 08:26	09/01/22 15:33	10
Cadmium	<0.00050	^1+	0.00050		mg/L		08/31/22 08:26	08/31/22 21:49	1
<b>Calcium</b>	<b>65</b>		0.20		mg/L		08/31/22 08:26	08/31/22 21:49	1
Chromium	<0.0050		0.0050		mg/L		08/31/22 08:26	08/31/22 21:49	1
Cobalt	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:49	1
Lead	<0.00050		0.00050		mg/L		08/31/22 08:26	08/31/22 21:49	1
<b>Lithium</b>	<b>0.016</b>		0.010		mg/L		08/31/22 08:26	08/31/22 21:49	1
<b>Molybdenum</b>	<b>0.073</b>		0.0050		mg/L		08/31/22 08:26	08/31/22 21:49	1
Selenium	<0.0025		0.0025		mg/L		08/31/22 08:26	08/31/22 21:49	1
Thallium	<0.0020		0.0020		mg/L		08/31/22 08:26	08/31/22 21:49	1

## Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/31/22 10:00	09/01/22 09:32	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>1100</b>		10		mg/L			09/01/22 15:26	1
<b>Chloride</b>	<b>130</b>		20		mg/L			08/29/22 13:41	10
<b>Fluoride</b>	<b>0.75</b>		0.10		mg/L			09/02/22 13:55	1
<b>Sulfate</b>	<b>450</b>		100		mg/L			08/29/22 15:32	20

# Client Sample Results

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

Job ID: 500-221301-1

**Client Sample ID: MW-08**  
**Date Collected: 08/25/22 12:42**  
**Date Received: 08/26/22 09:40**

**Lab Sample ID: 500-221301-10**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/31/22 08:26	08/31/22 21:52	1
<b>Arsenic</b>	<b>0.0062</b>		0.0010		mg/L		08/31/22 08:26	08/31/22 21:52	1
<b>Barium</b>	<b>0.059</b>		0.0025		mg/L		08/31/22 08:26	08/31/22 21:52	1
Beryllium	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:52	1
<b>Boron</b>	<b>3.0</b>		0.50		mg/L		08/31/22 08:26	09/01/22 15:36	10
<b>Cadmium</b>	<b>0.0012</b>	<b>^1+</b>	0.00050		mg/L		08/31/22 08:26	08/31/22 21:52	1
<b>Calcium</b>	<b>120</b>		0.20		mg/L		08/31/22 08:26	08/31/22 21:52	1
Chromium	<0.0050		0.0050		mg/L		08/31/22 08:26	08/31/22 21:52	1
Cobalt	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 21:52	1
Lead	<0.00050		0.00050		mg/L		08/31/22 08:26	08/31/22 21:52	1
<b>Lithium</b>	<b>0.019</b>		0.010		mg/L		08/31/22 08:26	08/31/22 21:52	1
<b>Molybdenum</b>	<b>0.085</b>		0.0050		mg/L		08/31/22 08:26	08/31/22 21:52	1
Selenium	<0.0025		0.0025		mg/L		08/31/22 08:26	08/31/22 21:52	1
Thallium	<0.0020		0.0020		mg/L		08/31/22 08:26	08/31/22 21:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/31/22 10:00	09/01/22 09:34	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>1200</b>		10		mg/L			09/01/22 15:27	1
<b>Chloride</b>	<b>140</b>		20		mg/L			08/29/22 13:41	10
<b>Fluoride</b>	<b>0.75</b>		0.10		mg/L			09/02/22 14:04	1
<b>Sulfate</b>	<b>480</b>		100		mg/L			08/29/22 15:32	20

# Definitions/Glossary

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

Job ID: 500-221301-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.

### 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.
F3	Duplicate RPD exceeds the control 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: 500-221301-1

## Metals

### Prep Batch: 672467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221301-1	MW-01	Total Recoverable	Water	3005A	
500-221301-2	MW-02	Total Recoverable	Water	3005A	
500-221301-3	MW-03	Total Recoverable	Water	3005A	
500-221301-4	MW-04	Total Recoverable	Water	3005A	
500-221301-5	MW-13	Total Recoverable	Water	3005A	
500-221301-6	MW-14	Total Recoverable	Water	3005A	
500-221301-7	MW-15	Total Recoverable	Water	3005A	
500-221301-8	DUPLICATE	Total Recoverable	Water	3005A	
500-221301-9	MW-07	Total Recoverable	Water	3005A	
500-221301-10	MW-08	Total Recoverable	Water	3005A	
MB 500-672467/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-672467/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-221301-1 MS	MW-01	Total Recoverable	Water	3005A	
500-221301-1 MSD	MW-01	Total Recoverable	Water	3005A	
500-221301-1 DU	MW-01	Total Recoverable	Water	3005A	

### Prep Batch: 672545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221301-1	MW-01	Total/NA	Water	7470A	
500-221301-2	MW-02	Total/NA	Water	7470A	
500-221301-3	MW-03	Total/NA	Water	7470A	
500-221301-4	MW-04	Total/NA	Water	7470A	
500-221301-5	MW-13	Total/NA	Water	7470A	
500-221301-6	MW-14	Total/NA	Water	7470A	
500-221301-7	MW-15	Total/NA	Water	7470A	
500-221301-8	DUPLICATE	Total/NA	Water	7470A	
500-221301-9	MW-07	Total/NA	Water	7470A	
500-221301-10	MW-08	Total/NA	Water	7470A	
MB 500-672545/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-672545/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-221301-3 MS	MW-03	Total/NA	Water	7470A	
500-221301-3 MSD	MW-03	Total/NA	Water	7470A	
500-221301-3 DU	MW-03	Total/NA	Water	7470A	

### Analysis Batch: 672787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221301-1	MW-01	Total Recoverable	Water	6020A	672467
500-221301-2	MW-02	Total Recoverable	Water	6020A	672467
500-221301-3	MW-03	Total Recoverable	Water	6020A	672467
500-221301-4	MW-04	Total Recoverable	Water	6020A	672467
500-221301-5	MW-13	Total Recoverable	Water	6020A	672467
500-221301-6	MW-14	Total Recoverable	Water	6020A	672467
500-221301-7	MW-15	Total Recoverable	Water	6020A	672467
500-221301-8	DUPLICATE	Total Recoverable	Water	6020A	672467
500-221301-9	MW-07	Total Recoverable	Water	6020A	672467
500-221301-10	MW-08	Total Recoverable	Water	6020A	672467
MB 500-672467/1-A	Method Blank	Total Recoverable	Water	6020A	672467
LCS 500-672467/2-A	Lab Control Sample	Total Recoverable	Water	6020A	672467
500-221301-1 MS	MW-01	Total Recoverable	Water	6020A	672467
500-221301-1 MSD	MW-01	Total Recoverable	Water	6020A	672467
500-221301-1 DU	MW-01	Total Recoverable	Water	6020A	672467

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# QC Association Summary

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

Job ID: 500-221301-1

## Metals

### Analysis Batch: 672814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221301-1	MW-01	Total/NA	Water	7470A	672545
500-221301-2	MW-02	Total/NA	Water	7470A	672545
500-221301-3	MW-03	Total/NA	Water	7470A	672545
500-221301-4	MW-04	Total/NA	Water	7470A	672545
500-221301-5	MW-13	Total/NA	Water	7470A	672545
500-221301-6	MW-14	Total/NA	Water	7470A	672545
500-221301-7	MW-15	Total/NA	Water	7470A	672545
500-221301-8	DUPLICATE	Total/NA	Water	7470A	672545
500-221301-9	MW-07	Total/NA	Water	7470A	672545
500-221301-10	MW-08	Total/NA	Water	7470A	672545
MB 500-672545/12-A	Method Blank	Total/NA	Water	7470A	672545
LCS 500-672545/13-A	Lab Control Sample	Total/NA	Water	7470A	672545
500-221301-3 MS	MW-03	Total/NA	Water	7470A	672545
500-221301-3 MSD	MW-03	Total/NA	Water	7470A	672545
500-221301-3 DU	MW-03	Total/NA	Water	7470A	672545

### Analysis Batch: 672872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221301-1	MW-01	Total Recoverable	Water	6020A	672467
500-221301-2	MW-02	Total Recoverable	Water	6020A	672467
500-221301-3	MW-03	Total Recoverable	Water	6020A	672467
500-221301-4	MW-04	Total Recoverable	Water	6020A	672467
500-221301-5	MW-13	Total Recoverable	Water	6020A	672467
500-221301-6	MW-14	Total Recoverable	Water	6020A	672467
500-221301-7	MW-15	Total Recoverable	Water	6020A	672467
500-221301-8	DUPLICATE	Total Recoverable	Water	6020A	672467
500-221301-9	MW-07	Total Recoverable	Water	6020A	672467
500-221301-10	MW-08	Total Recoverable	Water	6020A	672467
MB 500-672467/1-A	Method Blank	Total Recoverable	Water	6020A	672467
LCS 500-672467/2-A	Lab Control Sample	Total Recoverable	Water	6020A	672467
500-221301-1 MS	MW-01	Total Recoverable	Water	6020A	672467
500-221301-1 MSD	MW-01	Total Recoverable	Water	6020A	672467
500-221301-1 DU	MW-01	Total Recoverable	Water	6020A	672467

## General Chemistry

### Analysis Batch: 671760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221301-1	MW-01	Total/NA	Water	SM 4500 CI- E	
500-221301-2	MW-02	Total/NA	Water	SM 4500 CI- E	
500-221301-3	MW-03	Total/NA	Water	SM 4500 CI- E	
500-221301-4	MW-04	Total/NA	Water	SM 4500 CI- E	
500-221301-5	MW-13	Total/NA	Water	SM 4500 CI- E	
500-221301-6	MW-14	Total/NA	Water	SM 4500 CI- E	
500-221301-7	MW-15	Total/NA	Water	SM 4500 CI- E	
500-221301-8	DUPLICATE	Total/NA	Water	SM 4500 CI- E	
MB 500-671760/51	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-671760/52	Lab Control Sample	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: 500-221301-1

## General Chemistry

### Analysis Batch: 671776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221301-1	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-221301-2	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-221301-3	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-221301-4	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-221301-5	MW-13	Total/NA	Water	SM 4500 SO4 E	
500-221301-6	MW-14	Total/NA	Water	SM 4500 SO4 E	
500-221301-7	MW-15	Total/NA	Water	SM 4500 SO4 E	
500-221301-8	DUPLICATE	Total/NA	Water	SM 4500 SO4 E	
MB 500-671776/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
MB 500-671776/58	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-671776/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
LCS 500-671776/59	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-221301-5 MS	MW-13	Total/NA	Water	SM 4500 SO4 E	
500-221301-5 MSD	MW-13	Total/NA	Water	SM 4500 SO4 E	

### Analysis Batch: 672196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221301-9	MW-07	Total/NA	Water	SM 4500 Cl- E	
500-221301-10	MW-08	Total/NA	Water	SM 4500 Cl- E	
MB 500-672196/16	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-672196/17	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

### Analysis Batch: 672207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221301-9	MW-07	Total/NA	Water	SM 4500 SO4 E	
500-221301-10	MW-08	Total/NA	Water	SM 4500 SO4 E	
MB 500-672207/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-672207/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

### Analysis Batch: 672594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221301-1	MW-01	Total/NA	Water	SM 2540C	
500-221301-2	MW-02	Total/NA	Water	SM 2540C	
500-221301-3	MW-03	Total/NA	Water	SM 2540C	
500-221301-4	MW-04	Total/NA	Water	SM 2540C	
500-221301-5	MW-13	Total/NA	Water	SM 2540C	
500-221301-6	MW-14	Total/NA	Water	SM 2540C	
500-221301-7	MW-15	Total/NA	Water	SM 2540C	
500-221301-8	DUPLICATE	Total/NA	Water	SM 2540C	
MB 500-672594/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-672594/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-221301-3 DU	MW-03	Total/NA	Water	SM 2540C	

### Analysis Batch: 672840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221301-9	MW-07	Total/NA	Water	SM 2540C	
500-221301-10	MW-08	Total/NA	Water	SM 2540C	
MB 500-672840/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-672840/2	Lab Control Sample	Total/NA	Water	SM 2540C	



# QC Association Summary

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

Job ID: 500-221301-1

## General Chemistry

### Analysis Batch: 673068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221301-1	MW-01	Total/NA	Water	SM 4500 F C	
500-221301-2	MW-02	Total/NA	Water	SM 4500 F C	
500-221301-3	MW-03	Total/NA	Water	SM 4500 F C	
500-221301-4	MW-04	Total/NA	Water	SM 4500 F C	
500-221301-5	MW-13	Total/NA	Water	SM 4500 F C	
500-221301-6	MW-14	Total/NA	Water	SM 4500 F C	
500-221301-7	MW-15	Total/NA	Water	SM 4500 F C	
500-221301-8	DUPLICATE	Total/NA	Water	SM 4500 F C	
500-221301-9	MW-07	Total/NA	Water	SM 4500 F C	
500-221301-10	MW-08	Total/NA	Water	SM 4500 F C	
MB 500-673068/3	Method Blank	Total/NA	Water	SM 4500 F C	
MB 500-673068/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-673068/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCS 500-673068/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-221301-10 MS	MW-08	Total/NA	Water	SM 4500 F C	
500-221301-10 MSD	MW-08	Total/NA	Water	SM 4500 F C	

# QC Sample Results

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

Job ID: 500-221301-1

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

**Lab Sample ID: MB 500-672467/1-A**  
**Matrix: Water**  
**Analysis Batch: 672787**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 672467**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0030		0.0030		mg/L		08/31/22 08:26	08/31/22 20:54	1
Arsenic	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 20:54	1
Barium	<0.0025		0.0025		mg/L		08/31/22 08:26	08/31/22 20:54	1
Beryllium	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 20:54	1
Cadmium	<0.00050	^1+	0.00050		mg/L		08/31/22 08:26	08/31/22 20:54	1
Calcium	<0.20		0.20		mg/L		08/31/22 08:26	08/31/22 20:54	1
Chromium	<0.0050		0.0050		mg/L		08/31/22 08:26	08/31/22 20:54	1
Cobalt	<0.0010		0.0010		mg/L		08/31/22 08:26	08/31/22 20:54	1
Lead	<0.00050		0.00050		mg/L		08/31/22 08:26	08/31/22 20:54	1
Lithium	<0.010		0.010		mg/L		08/31/22 08:26	08/31/22 20:54	1
Molybdenum	<0.0050		0.0050		mg/L		08/31/22 08:26	08/31/22 20:54	1
Selenium	<0.0025		0.0025		mg/L		08/31/22 08:26	08/31/22 20:54	1
Thallium	<0.0020		0.0020		mg/L		08/31/22 08:26	08/31/22 20:54	1

**Lab Sample ID: MB 500-672467/1-A**  
**Matrix: Water**  
**Analysis Batch: 672872**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 672467**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Boron	<0.050		0.050		mg/L		08/31/22 08:26	09/01/22 14:38	1

**Lab Sample ID: LCS 500-672467/2-A**  
**Matrix: Water**  
**Analysis Batch: 672787**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 672467**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.100	0.0953		mg/L		95	80 - 120
Barium	2.00	1.99		mg/L		99	80 - 120
Beryllium	0.0500	0.0500		mg/L		100	80 - 120
Cadmium	0.0500	0.0516	^1+	mg/L		103	80 - 120
Calcium	10.0	8.70		mg/L		87	80 - 120
Chromium	0.200	0.200		mg/L		100	80 - 120
Cobalt	0.500	0.497		mg/L		99	80 - 120
Lead	0.100	0.108		mg/L		108	80 - 120
Lithium	0.500	0.532		mg/L		106	80 - 120
Molybdenum	1.00	0.979		mg/L		98	80 - 120
Selenium	0.100	0.0940		mg/L		94	80 - 120
Thallium	0.100	0.105		mg/L		105	80 - 120

**Lab Sample ID: LCS 500-672467/2-A**  
**Matrix: Water**  
**Analysis Batch: 672872**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 672467**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

# QC Sample Results

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

Job ID: 500-221301-1

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

**Lab Sample ID: 500-221301-1 MS**  
**Matrix: Water**  
**Analysis Batch: 672787**

**Client Sample ID: MW-01**  
**Prep Type: Total Recoverable**  
**Prep Batch: 672467**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.0030		0.500	0.503		mg/L		101	75 - 125
Arsenic	<0.0010		0.100	0.100		mg/L		99	75 - 125
Barium	0.093		2.00	2.03		mg/L		97	75 - 125
Beryllium	<0.0010		0.0500	0.0515		mg/L		103	75 - 125
Cadmium	0.00092	^1+	0.0500	0.0507	^1+	mg/L		100	75 - 125
Calcium	180		10.0	184	4	mg/L		82	75 - 125
Chromium	<0.0050		0.200	0.195		mg/L		97	75 - 125
Cobalt	0.0016		0.500	0.480		mg/L		96	75 - 125
Lead	0.00078		0.100	0.102		mg/L		102	75 - 125
Lithium	0.038		0.500	0.543		mg/L		101	75 - 125
Molybdenum	0.015		1.00	0.971		mg/L		96	75 - 125
Selenium	0.0047		0.100	0.104		mg/L		99	75 - 125
Thallium	<0.0020		0.100	0.101		mg/L		101	75 - 125

**Lab Sample ID: 500-221301-1 MS**  
**Matrix: Water**  
**Analysis Batch: 672872**

**Client Sample ID: MW-01**  
**Prep Type: Total Recoverable**  
**Prep Batch: 672467**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	2.7		1.00	3.68		mg/L		102	75 - 125

**Lab Sample ID: 500-221301-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 672787**

**Client Sample ID: MW-01**  
**Prep Type: Total Recoverable**  
**Prep Batch: 672467**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.0030		0.500	0.502		mg/L		100	75 - 125	0	20
Arsenic	<0.0010		0.100	0.0999		mg/L		99	75 - 125	0	20
Barium	0.093		2.00	2.05		mg/L		98	75 - 125	1	20
Beryllium	<0.0010		0.0500	0.0499		mg/L		100	75 - 125	3	20
Cadmium	0.00092	^1+	0.0500	0.0500	^1+	mg/L		98	75 - 125	1	20
Calcium	180		10.0	180	4	mg/L		51	75 - 125	2	20
Chromium	<0.0050		0.200	0.195		mg/L		97	75 - 125	0	20
Cobalt	0.0016		0.500	0.476		mg/L		95	75 - 125	1	20
Lead	0.00078		0.100	0.104		mg/L		103	75 - 125	1	20
Lithium	0.038		0.500	0.529		mg/L		98	75 - 125	3	20
Molybdenum	0.015		1.00	0.971		mg/L		96	75 - 125	0	20
Selenium	0.0047		0.100	0.107		mg/L		102	75 - 125	3	20
Thallium	<0.0020		0.100	0.102		mg/L		102	75 - 125	1	20

**Lab Sample ID: 500-221301-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 672872**

**Client Sample ID: MW-01**  
**Prep Type: Total Recoverable**  
**Prep Batch: 672467**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	2.7		1.00	3.64		mg/L		97	75 - 125	1	20

# QC Sample Results

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

Job ID: 500-221301-1

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

**Lab Sample ID: 500-221301-1 DU**  
**Matrix: Water**  
**Analysis Batch: 672787**

**Client Sample ID: MW-01**  
**Prep Type: Total Recoverable**  
**Prep Batch: 672467**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	<0.0030		<0.0030		mg/L		NC	20
Arsenic	<0.0010		<0.0010		mg/L		NC	20
Barium	0.093		0.0977		mg/L		5	20
Beryllium	<0.0010		<0.0010		mg/L		NC	20
Cadmium	0.00092	^1+	0.000955	^1+	mg/L		4	20
Calcium	180		173		mg/L		1	20
Chromium	<0.0050		<0.0050		mg/L		NC	20
Cobalt	0.0016		0.00148		mg/L		5	20
Lead	0.00078		0.000632	F5	mg/L		21	20
Lithium	0.038		0.0365		mg/L		4	20
Molybdenum	0.015		0.0161		mg/L		7	20
Selenium	0.0047		0.00513		mg/L		8	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

**Lab Sample ID: 500-221301-1 DU**  
**Matrix: Water**  
**Analysis Batch: 672872**

**Client Sample ID: MW-01**  
**Prep Type: Total Recoverable**  
**Prep Batch: 672467**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Boron	2.7		2.70		mg/L		1	20

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 500-672545/12-A**  
**Matrix: Water**  
**Analysis Batch: 672814**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 672545**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020		mg/L		08/31/22 10:00	09/01/22 07:24	1

**Lab Sample ID: LCS 500-672545/13-A**  
**Matrix: Water**  
**Analysis Batch: 672814**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 672545**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

**Lab Sample ID: 500-221301-3 MS**  
**Matrix: Water**  
**Analysis Batch: 672814**

**Client Sample ID: MW-03**  
**Prep Type: Total/NA**  
**Prep Batch: 672545**

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Mercury	<0.00020		0.00100	0.000988		mg/L		99	75 - 125

**Lab Sample ID: 500-221301-3 MSD**  
**Matrix: Water**  
**Analysis Batch: 672814**

**Client Sample ID: MW-03**  
**Prep Type: Total/NA**  
**Prep Batch: 672545**

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Mercury	<0.00020		0.00100	0.000986		mg/L		99	75 - 125	0	20

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# QC Sample Results

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

Job ID: 500-221301-1

## Method: 7470A - Mercury (CVAA)

Lab Sample ID: 500-221301-3 DU  
Matrix: Water  
Analysis Batch: 672814

Client Sample ID: MW-03  
Prep Type: Total/NA  
Prep Batch: 672545

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

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

Lab Sample ID: MB 500-672594/1  
Matrix: Water  
Analysis Batch: 672594

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			08/31/22 15:35	1

Lab Sample ID: LCS 500-672594/2  
Matrix: Water  
Analysis Batch: 672594

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	296		mg/L		118	80 - 120

Lab Sample ID: 500-221301-3 DU  
Matrix: Water  
Analysis Batch: 672594

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	1200		1130	F3	mg/L		6	5

Lab Sample ID: MB 500-672840/1  
Matrix: Water  
Analysis Batch: 672840

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			09/01/22 15:15	1

Lab Sample ID: LCS 500-672840/2  
Matrix: Water  
Analysis Batch: 672840

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	298		mg/L		119	80 - 120

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

Lab Sample ID: MB 500-671760/51  
Matrix: Water  
Analysis Batch: 671760

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			08/25/22 14:38	1

# QC Sample Results

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

Job ID: 500-221301-1

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

**Lab Sample ID:** LCS 500-671760/52  
**Matrix:** Water  
**Analysis Batch:** 671760

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	19.7		mg/L		99	85 - 115

**Lab Sample ID:** MB 500-672196/16  
**Matrix:** Water  
**Analysis Batch:** 672196

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			08/29/22 13:38	1

**Lab Sample ID:** LCS 500-672196/17  
**Matrix:** Water  
**Analysis Batch:** 672196

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

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

## Method: SM 4500 F C - Fluoride

**Lab Sample ID:** MB 500-673068/3  
**Matrix:** Water  
**Analysis Batch:** 673068

**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			09/02/22 12:45	1

**Lab Sample ID:** MB 500-673068/31  
**Matrix:** Water  
**Analysis Batch:** 673068

**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			09/02/22 13:59	1

**Lab Sample ID:** LCS 500-673068/32  
**Matrix:** Water  
**Analysis Batch:** 673068

**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	10.8		mg/L		108	90 - 119

**Lab Sample ID:** LCS 500-673068/4  
**Matrix:** Water  
**Analysis Batch:** 673068

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	10.4		mg/L		104	90 - 119

# QC Sample Results

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

Job ID: 500-221301-1

## Method: SM 4500 F C - Fluoride (Continued)

**Lab Sample ID: 500-221301-10 MS**  
**Matrix: Water**  
**Analysis Batch: 673068**

**Client Sample ID: MW-08**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.75		5.00	6.14		mg/L		108	75 - 125

**Lab Sample ID: 500-221301-10 MSD**  
**Matrix: Water**  
**Analysis Batch: 673068**

**Client Sample ID: MW-08**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.75		5.00	6.17		mg/L		108	75 - 125	0	20

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

**Lab Sample ID: MB 500-671776/16**  
**Matrix: Water**  
**Analysis Batch: 671776**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			08/25/22 15:28	1

**Lab Sample ID: MB 500-671776/58**  
**Matrix: Water**  
**Analysis Batch: 671776**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			08/25/22 15:59	1

**Lab Sample ID: LCS 500-671776/17**  
**Matrix: Water**  
**Analysis Batch: 671776**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	20.0	21.1		mg/L		105	88 - 123

**Lab Sample ID: LCS 500-671776/59**  
**Matrix: Water**  
**Analysis Batch: 671776**

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

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

**Lab Sample ID: 500-221301-5 MS**  
**Matrix: Water**  
**Analysis Batch: 671776**

**Client Sample ID: MW-13**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	210		20.0	225	4	mg/L		59	75 - 125

# QC Sample Results

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

Job ID: 500-221301-1

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

**Lab Sample ID: 500-221301-5 MSD**  
**Matrix: Water**  
**Analysis Batch: 671776**

**Client Sample ID: MW-13**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	210		20.0	223	4	mg/L		52	75 - 125	1	20

**Lab Sample ID: MB 500-672207/16**  
**Matrix: Water**  
**Analysis Batch: 672207**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			08/29/22 14:52	1

**Lab Sample ID: LCS 500-672207/17**  
**Matrix: Water**  
**Analysis Batch: 672207**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	20.0	20.9		mg/L		105	88 - 123



**Eurofins TestAmerica, Chicago**

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

**Chain of Custody Record**



Environ Teing  
 Amer ca

<b>Client Information</b>		Sampler: <u>IAN J. HANWESON</u>		Lab PM: Mockler Diana J		Carrier Tracking No(s):																				
Client Contact: Mitchel Dolan		Phone: <u>630-290-6850</u>		E-Mail: Diana Mockler@Eurofinset.com		State of Origin: 500-221301 COC																				
Company: KPRG and Associates Inc.		PWSID:		<b>Analysis Requested</b>				Job #: <u>500-221301</u>																		
Address: 14665 West Lisbon Road, Suite 1A		Due Date Requested:		Field Filtered Sample (Yes or No) <input type="checkbox"/> Perform MS/MSD (Yes or No) <input type="checkbox"/> 903.0, 904.0, Radium Combined <input type="checkbox"/> 6010C - Lithium, 6020A - Metals (13 elements), 7470A - Mercury <input type="checkbox"/> 2640C TDS, 4600FC - Fluoride <input type="checkbox"/> SM4500ClE Chloride, SM4500SO4E - Sulfate <input type="checkbox"/>				TAT Requested (days):		Total Number of containers:																
City: Brookfield		Compliance Project. <input type="checkbox"/> Yes <input type="checkbox"/> No																								
State/Zip: WI 53005		PO #: 4502041043																								
Phone: 262-781-0475		WO #:																								
Email: mitcheld@kprginc.com		Project #: 50011609																								
Project Name: Will County CCR 1N/1S		SSOW#:		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 Z other (specify)																						
Site: Illinois		Other:		Special Instructions/Note:																						
<b>Sample Identification</b>		<b>Sample Date</b>		<b>Sample Time</b>		<b>Sample Type (C=comp, G=grab)</b>		<b>Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)</b>		<b>Preservation Code:</b>		<b>Field Filtered Sample (Yes or No)</b>		<b>Perform MS/MSD (Yes or No)</b>		<b>903.0, 904.0, Radium Combined</b>		<b>6010C - Lithium, 6020A - Metals (13 elements), 7470A - Mercury</b>		<b>2640C TDS, 4600FC - Fluoride</b>		<b>SM4500ClE Chloride, SM4500SO4E - Sulfate</b>		<b>Total Number of containers</b>		
1	MW-01		8-24-22		09:10		W		W		N		X		X		X		X				5		*Metals List Sb,As,Ba,Be,B,Cd,Ca,Cr,Co,Pb,Mo,Se,Tl	
2	MW-02		8-24-22		10:42		W		W		N		X		X		X		X				5			
3	MW-03		8-24-22		12:18		W		W		N		X		X		X		X				5			
4	MW-04		8-24-22		13:26		W		W		N		X		X		X		X				5			
5	MW-13		8-23-22		14:00		W		W		N		X		X		X		X				5			
6	MW-14		8-23-22		12:52		W		W		N		X		X		X		X				5			
7	MW-15		8-23-22		11:57		W		W		N		X		X		X		X				5			
8	DUPLICATE		8-23-22		-		W		W		N		X		X		X		X				5			
<b>Possible Hazard Identification</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		<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>		<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: _____		Date/Time: 8-24-22 16:30		Company: KPRG		Received by: _____		Date/Time: 8/24/22 1630		Company: KPRG																
Relinquished by: _____		Date/Time: _____		Company: _____		Received by: _____		Date/Time: _____		Company: _____																
Relinquished by: _____		Date/Time: _____		Company: _____		Received by: _____		Date/Time: _____		Company: _____																
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: 4.1 → 2.8, 4.7 → 3.4 24 → 11																						



# Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-221301-1

**Login Number: 221301**

**List Number: 1**

**Creator: James, Jeff A**

**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	2.8,3.4,1.1,1.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Lab Chronicle

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

Job ID: 500-221301-1

**Client Sample ID: MW-01**  
**Date Collected: 08/24/22 09:10**  
**Date Received: 08/24/22 16:30**

**Lab Sample ID: 500-221301-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	672787	FXG	EET CHI	08/31/22 21:01
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		10	672872	FXG	EET CHI	09/01/22 14:45
Total/NA	Prep	7470A			672545	MJG	EET CHI	08/31/22 10:00 - 08/31/22 12:00 <sup>1</sup>
Total/NA	Analysis	7470A		1	672814	MJG	EET CHI	09/01/22 07:41
Total/NA	Analysis	SM 2540C		1	672594	SMO	EET CHI	08/31/22 15:46
Total/NA	Analysis	SM 4500 CI- E		1	671760	LP	EET CHI	08/25/22 14:39
Total/NA	Analysis	SM 4500 F C		1	673068	EAT	EET CHI	09/02/22 13:30
Total/NA	Analysis	SM 4500 SO4 E		20	671776	LP	EET CHI	08/25/22 15:35

**Client Sample ID: MW-02**  
**Date Collected: 08/24/22 10:42**  
**Date Received: 08/24/22 16:30**

**Lab Sample ID: 500-221301-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	672787	FXG	EET CHI	08/31/22 21:18
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		20	672872	FXG	EET CHI	09/01/22 15:02
Total/NA	Prep	7470A			672545	MJG	EET CHI	08/31/22 10:00 - 08/31/22 12:00 <sup>1</sup>
Total/NA	Analysis	7470A		1	672814	MJG	EET CHI	09/01/22 08:56
Total/NA	Analysis	SM 2540C		1	672594	SMO	EET CHI	08/31/22 15:48
Total/NA	Analysis	SM 4500 CI- E		1	671760	LP	EET CHI	08/25/22 14:39
Total/NA	Analysis	SM 4500 F C		1	673068	EAT	EET CHI	09/02/22 13:32
Total/NA	Analysis	SM 4500 SO4 E		20	671776	LP	EET CHI	08/25/22 15:36

**Client Sample ID: MW-03**  
**Date Collected: 08/24/22 12:18**  
**Date Received: 08/24/22 16:30**

**Lab Sample ID: 500-221301-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	672787	FXG	EET CHI	08/31/22 21:21
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		10	672872	FXG	EET CHI	09/01/22 15:05
Total/NA	Prep	7470A			672545	MJG	EET CHI	08/31/22 10:00 - 08/31/22 12:00 <sup>1</sup>
Total/NA	Analysis	7470A		1	672814	MJG	EET CHI	09/01/22 08:58
Total/NA	Analysis	SM 2540C		1	672594	SMO	EET CHI	08/31/22 15:49
Total/NA	Analysis	SM 4500 CI- E		1	671760	LP	EET CHI	08/25/22 14:39
Total/NA	Analysis	SM 4500 F C		1	673068	EAT	EET CHI	09/02/22 13:35
Total/NA	Analysis	SM 4500 SO4 E		20	671776	LP	EET CHI	08/25/22 15:36

# Lab Chronicle

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

Job ID: 500-221301-1

**Client Sample ID: MW-04**  
**Date Collected: 08/24/22 13:26**  
**Date Received: 08/24/22 16:30**

**Lab Sample ID: 500-221301-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	672787	FXG	EET CHI	08/31/22 21:25
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		20	672872	FXG	EET CHI	09/01/22 15:09
Total/NA	Prep	7470A			672545	MJG	EET CHI	08/31/22 10:00 - 08/31/22 12:00 <sup>1</sup>
Total/NA	Analysis	7470A		1	672814	MJG	EET CHI	09/01/22 09:21
Total/NA	Analysis	SM 2540C		1	672594	SMO	EET CHI	08/31/22 15:52
Total/NA	Analysis	SM 4500 CI- E		1	671760	LP	EET CHI	08/25/22 14:39
Total/NA	Analysis	SM 4500 F C		1	673068	EAT	EET CHI	09/02/22 13:37
Total/NA	Analysis	SM 4500 SO4 E		50	671776	LP	EET CHI	08/25/22 15:37

**Client Sample ID: MW-13**  
**Date Collected: 08/24/22 14:00**  
**Date Received: 08/24/22 16:30**

**Lab Sample ID: 500-221301-5**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	672787	FXG	EET CHI	08/31/22 21:35
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		5	672872	FXG	EET CHI	09/01/22 15:19
Total/NA	Prep	7470A			672545	MJG	EET CHI	08/31/22 10:00 - 08/31/22 12:00 <sup>1</sup>
Total/NA	Analysis	7470A		1	672814	MJG	EET CHI	09/01/22 09:23
Total/NA	Analysis	SM 2540C		1	672594	SMO	EET CHI	08/31/22 15:54
Total/NA	Analysis	SM 4500 CI- E		10	671760	LP	EET CHI	08/25/22 14:40
Total/NA	Analysis	SM 4500 F C		1	673068	EAT	EET CHI	09/02/22 13:40
Total/NA	Analysis	SM 4500 SO4 E		10	671776	LP	EET CHI	08/25/22 16:01

**Client Sample ID: MW-14**  
**Date Collected: 08/24/22 12:52**  
**Date Received: 08/24/22 16:30**

**Lab Sample ID: 500-221301-6**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	672787	FXG	EET CHI	08/31/22 21:39
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		20	672872	FXG	EET CHI	09/01/22 15:22
Total/NA	Prep	7470A			672545	MJG	EET CHI	08/31/22 10:00 - 08/31/22 12:00 <sup>1</sup>
Total/NA	Analysis	7470A		1	672814	MJG	EET CHI	09/01/22 09:25
Total/NA	Analysis	SM 2540C		1	672594	SMO	EET CHI	08/31/22 15:55
Total/NA	Analysis	SM 4500 CI- E		10	671760	LP	EET CHI	08/25/22 14:40
Total/NA	Analysis	SM 4500 F C		1	673068	EAT	EET CHI	09/02/22 13:48
Total/NA	Analysis	SM 4500 SO4 E		50	671776	LP	EET CHI	08/25/22 16:01

# Lab Chronicle

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

Job ID: 500-221301-1

**Client Sample ID: MW-15**  
**Date Collected: 08/24/22 11:57**  
**Date Received: 08/24/22 16:30**

**Lab Sample ID: 500-221301-7**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	672787	FXG	EET CHI	08/31/22 21:42
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		10	672872	FXG	EET CHI	09/01/22 15:26
Total/NA	Prep	7470A			672545	MJG	EET CHI	08/31/22 10:00 - 08/31/22 12:00 <sup>1</sup>
Total/NA	Analysis	7470A		1	672814	MJG	EET CHI	09/01/22 09:27
Total/NA	Analysis	SM 2540C		1	672594	SMO	EET CHI	08/31/22 15:57
Total/NA	Analysis	SM 4500 CI- E		10	671760	LP	EET CHI	08/25/22 14:40
Total/NA	Analysis	SM 4500 F C		1	673068	EAT	EET CHI	09/02/22 13:51
Total/NA	Analysis	SM 4500 SO4 E		50	671776	LP	EET CHI	08/25/22 16:02

**Client Sample ID: DUPLICATE**  
**Date Collected: 08/24/22 00:00**  
**Date Received: 08/24/22 16:30**

**Lab Sample ID: 500-221301-8**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	672787	FXG	EET CHI	08/31/22 21:46
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		5	672872	FXG	EET CHI	09/01/22 15:29
Total/NA	Prep	7470A			672545	MJG	EET CHI	08/31/22 10:00 - 08/31/22 12:00 <sup>1</sup>
Total/NA	Analysis	7470A		1	672814	MJG	EET CHI	09/01/22 09:30
Total/NA	Analysis	SM 2540C		1	672594	SMO	EET CHI	08/31/22 15:58
Total/NA	Analysis	SM 4500 CI- E		10	671760	LP	EET CHI	08/25/22 14:41
Total/NA	Analysis	SM 4500 F C		1	673068	EAT	EET CHI	09/02/22 13:53
Total/NA	Analysis	SM 4500 SO4 E		10	671776	LP	EET CHI	08/25/22 16:02

**Client Sample ID: MW-07**  
**Date Collected: 08/25/22 11:28**  
**Date Received: 08/26/22 09:40**

**Lab Sample ID: 500-221301-9**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	672787	FXG	EET CHI	08/31/22 21:49
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		10	672872	FXG	EET CHI	09/01/22 15:33
Total/NA	Prep	7470A			672545	MJG	EET CHI	08/31/22 10:00 - 08/31/22 12:00 <sup>1</sup>
Total/NA	Analysis	7470A		1	672814	MJG	EET CHI	09/01/22 09:32
Total/NA	Analysis	SM 2540C		1	672840	SMO	EET CHI	09/01/22 15:26
Total/NA	Analysis	SM 4500 CI- E		10	672196	LP	EET CHI	08/29/22 13:41
Total/NA	Analysis	SM 4500 F C		1	673068	EAT	EET CHI	09/02/22 13:55
Total/NA	Analysis	SM 4500 SO4 E		20	672207	LP	EET CHI	08/29/22 15:32

# Lab Chronicle

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

Job ID: 500-221301-1

**Client Sample ID: MW-08**

**Lab Sample ID: 500-221301-10**

**Date Collected: 08/25/22 12:42**

**Matrix: Water**

**Date Received: 08/26/22 09:40**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	672787	FXG	EET CHI	08/31/22 21:52
Total Recoverable	Prep	3005A			672467	BDE	EET CHI	08/31/22 08:26 - 08/31/22 08:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		10	672872	FXG	EET CHI	09/01/22 15:36
Total/NA	Prep	7470A			672545	MJG	EET CHI	08/31/22 10:00 - 08/31/22 12:00 <sup>1</sup>
Total/NA	Analysis	7470A		1	672814	MJG	EET CHI	09/01/22 09:34
Total/NA	Analysis	SM 2540C		1	672840	SMO	EET CHI	09/01/22 15:27
Total/NA	Analysis	SM 4500 Cl- E		10	672196	LP	EET CHI	08/29/22 13:41
Total/NA	Analysis	SM 4500 F C		1	673068	EAT	EET CHI	09/02/22 14:04
Total/NA	Analysis	SM 4500 SO4 E		20	672207	LP	EET CHI	08/29/22 15:32

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

**Laboratory References:**

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



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

Laboratory Job ID: 500-221301-2  
Client Project/Site: Will County CCR (RAD)

For:  
Midwest Generation EME LLC  
1800 Channahon Road  
Joliet, Illinois 60436

Attn: John Niedzwiecki



Authorized for release by:  
9/26/2022 7:35:07 AM

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

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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# Case Narrative

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

Job ID: 500-221301-2

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## Job ID: 500-221301-2

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### Laboratory: Eurofins Chicago

#### Narrative

#### Job Narrative 500-221301-2

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/24/2022 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 4 coolers at receipt time were 1.1° C, 1.1° C, 2.8° C and 3.4° C.

#### RAD

Methods 903.0, RA-06-RC: Radium-226 batch 580319

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

MW-01 (500-221301-1), MW-02 (500-221301-2), MW-03 (500-221301-3), MW-04 (500-221301-4), MW-13 (500-221301-5), MW-14 (500-221301-6), MW-15 (500-221301-7), DUPLICATE (500-221301-8), MW-07 (500-221301-9), MW-08 (500-221301-10), (LCS 160-580319/2-A), (MB 160-580319/1-A) and (500-221301-C-1-A DU)

Methods 904.0, RA-06-RC: Radium-228 batch 580328

The detection goal was not met for the following sample(s). The sample was prepped at a reduced volume due to the presence of matrix interferences: DUPLICATE (500-221301-8). Analytical results are reported with the detection limit achieved.

Methods 904.0, RA-06-RC: Radium-228 batch 580328

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

MW-01 (500-221301-1), MW-02 (500-221301-2), MW-03 (500-221301-3), MW-04 (500-221301-4), MW-13 (500-221301-5), MW-14 (500-221301-6), MW-15 (500-221301-7), DUPLICATE (500-221301-8), MW-07 (500-221301-9), MW-08 (500-221301-10), (LCS 160-580328/2-A), (MB 160-580328/1-A) and (500-221301-C-1-B DU)

Method PrecSep\_0:

Method PrecSep-21:

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

# Method Summary

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

Job ID: 500-221301-2

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: 500-221301-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-221301-1	MW-01	Water	08/24/22 09:10	08/24/22 16:30
500-221301-2	MW-02	Water	08/24/22 10:42	08/24/22 16:30
500-221301-3	MW-03	Water	08/24/22 12:18	08/24/22 16:30
500-221301-4	MW-04	Water	08/24/22 13:26	08/24/22 16:30
500-221301-5	MW-13	Water	08/24/22 14:00	08/24/22 16:30
500-221301-6	MW-14	Water	08/24/22 12:52	08/24/22 16:30
500-221301-7	MW-15	Water	08/24/22 11:57	08/24/22 16:30
500-221301-8	DUPLICATE	Water	08/24/22 00:00	08/24/22 16:30
500-221301-9	MW-07	Water	08/25/22 11:28	08/26/22 09:40
500-221301-10	MW-08	Water	08/25/22 12:42	08/26/22 09:40

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- 2
- 3
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- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Client Sample Results

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

Job ID: 500-221301-2

**Client Sample ID: MW-01**

**Lab Sample ID: 500-221301-1**

Date Collected: 08/24/22 09:10

Matrix: Water

Date Received: 08/24/22 16:30

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.138		0.0765	0.0775	1.00	0.0941	pCi/L	09/01/22 09:35	09/23/22 07:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.3		40 - 110					09/01/22 09:35	09/23/22 07:11	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.443	U	0.320	0.323	1.00	0.486	pCi/L	09/01/22 10:07	09/13/22 13:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.3		40 - 110					09/01/22 10:07	09/13/22 13:43	1
Y Carrier	80.7		40 - 110					09/01/22 10:07	09/13/22 13:43	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.581		0.329	0.332	5.00	0.486	pCi/L		09/25/22 18:57	1

# Client Sample Results

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

Job ID: 500-221301-2

**Client Sample ID: MW-02**

**Lab Sample ID: 500-221301-2**

Date Collected: 08/24/22 10:42

Matrix: Water

Date Received: 08/24/22 16:30

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.190		0.0874	0.0891	1.00	0.103	pCi/L	09/01/22 09:35	09/23/22 07:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.5		40 - 110					09/01/22 09:35	09/23/22 07:11	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.794		0.353	0.360	1.00	0.473	pCi/L	09/01/22 10:07	09/13/22 13:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.5		40 - 110					09/01/22 10:07	09/13/22 13:43	1
Y Carrier	84.1		40 - 110					09/01/22 10:07	09/13/22 13:43	1

**Method: 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	0.984		0.364	0.371	5.00	0.473	pCi/L		09/25/22 18:57	1

# Client Sample Results

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

Job ID: 500-221301-2

**Client Sample ID: MW-03**  
**Date Collected: 08/24/22 12:18**  
**Date Received: 08/24/22 16:30**

**Lab Sample ID: 500-221301-3**  
**Matrix: Water**

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.384</b>		0.121	0.126	1.00	0.114	pCi/L	09/01/22 09:35	09/23/22 07:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.0		40 - 110					09/01/22 09:35	09/23/22 07:11	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.854</b>		0.366	0.374	1.00	0.486	pCi/L	09/01/22 10:07	09/13/22 13:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.0		40 - 110					09/01/22 10:07	09/13/22 13:43	1
Y Carrier	83.4		40 - 110					09/01/22 10:07	09/13/22 13:43	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Combined Radium 226 + 228</b>	<b>1.24</b>		0.385	0.395	5.00	0.486	pCi/L		09/25/22 18:57	1

# Client Sample Results

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

Job ID: 500-221301-2

**Client Sample ID: MW-04**

**Lab Sample ID: 500-221301-4**

Date Collected: 08/24/22 13:26

Matrix: Water

Date Received: 08/24/22 16:30

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.235		0.0908	0.0932	1.00	0.0903	pCi/L	09/01/22 09:35	09/23/22 07:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					09/01/22 09:35	09/23/22 07:11	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.17		0.394	0.409	1.00	0.465	pCi/L	09/01/22 10:07	09/13/22 13:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					09/01/22 10:07	09/13/22 13:44	1
Y Carrier	79.3		40 - 110					09/01/22 10:07	09/13/22 13:44	1

**Method: 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	1.41		0.404	0.419	5.00	0.465	pCi/L		09/25/22 18:57	1



# Client Sample Results

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

Job ID: 500-221301-2

**Client Sample ID: MW-13**  
**Date Collected: 08/24/22 14:00**  
**Date Received: 08/24/22 16:30**

**Lab Sample ID: 500-221301-5**  
**Matrix: Water**

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.239		0.146	0.147	1.00	0.193	pCi/L	09/01/22 09:35	09/23/22 07:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	64.4		40 - 110					09/01/22 09:35	09/23/22 07:12	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.219	U	0.541	0.541	1.00	0.954	pCi/L	09/01/22 10:07	09/13/22 13:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	64.4		40 - 110					09/01/22 10:07	09/13/22 13:44	1
Y Carrier	83.7		40 - 110					09/01/22 10:07	09/13/22 13:44	1

**Method: 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	0.458	U	0.560	0.561	5.00	0.954	pCi/L		09/25/22 18:57	1

# Client Sample Results

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

Job ID: 500-221301-2

**Client Sample ID: MW-14**  
**Date Collected: 08/24/22 12:52**  
**Date Received: 08/24/22 16:30**

**Lab Sample ID: 500-221301-6**  
**Matrix: Water**

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.521</b>		0.147	0.154	1.00	0.147	pCi/L	09/01/22 09:35	09/23/22 07:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					09/01/22 09:35	09/23/22 07:12	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.927</b>		0.364	0.374	1.00	0.457	pCi/L	09/01/22 10:07	09/13/22 13:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					09/01/22 10:07	09/13/22 13:44	1
Y Carrier	82.6		40 - 110					09/01/22 10:07	09/13/22 13:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Combined Radium 226 + 228</b>	<b>1.45</b>		0.393	0.404	5.00	0.457	pCi/L		09/25/22 18:57	1

# Client Sample Results

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

Job ID: 500-221301-2

**Client Sample ID: MW-15**

**Lab Sample ID: 500-221301-7**

Date Collected: 08/24/22 11:57

Matrix: Water

Date Received: 08/24/22 16:30

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.159		0.0871	0.0882	1.00	0.113	pCi/L	09/01/22 09:35	09/23/22 09:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.8		40 - 110					09/01/22 09:35	09/23/22 09:06	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.556		0.328	0.332	1.00	0.474	pCi/L	09/01/22 10:07	09/13/22 13:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.8		40 - 110					09/01/22 10:07	09/13/22 13:44	1
Y Carrier	81.1		40 - 110					09/01/22 10:07	09/13/22 13:44	1

**Method: 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	0.714		0.339	0.344	5.00	0.474	pCi/L		09/25/22 18:57	1

# Client Sample Results

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

Job ID: 500-221301-2

**Client Sample ID: DUPLICATE**

**Lab Sample ID: 500-221301-8**

Date Collected: 08/24/22 00:00

Matrix: Water

Date Received: 08/24/22 16:30

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.521		0.245	0.249	1.00	0.300	pCi/L	09/01/22 09:35	09/23/22 09:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.6		40 - 110					09/01/22 09:35	09/23/22 09:07	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.760	U G	0.825	0.828	1.00	1.34	pCi/L	09/01/22 10:07	09/13/22 13:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.6		40 - 110					09/01/22 10:07	09/13/22 13:44	1
Y Carrier	80.4		40 - 110					09/01/22 10:07	09/13/22 13:44	1

**Method: 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	U	0.861	0.865	5.00	1.34	pCi/L		09/25/22 18:57	1

# Client Sample Results

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

Job ID: 500-221301-2

**Client Sample ID: MW-07**

**Lab Sample ID: 500-221301-9**

Date Collected: 08/25/22 11:28

Matrix: Water

Date Received: 08/26/22 09:40

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.313		0.122	0.126	1.00	0.135	pCi/L	09/01/22 09:35	09/23/22 09:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		40 - 110					09/01/22 09:35	09/23/22 09:07	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.631		0.384	0.389	1.00	0.555	pCi/L	09/01/22 10:07	09/13/22 13:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		40 - 110					09/01/22 10:07	09/13/22 13:44	1
Y Carrier	82.2		40 - 110					09/01/22 10:07	09/13/22 13:44	1

**Method: 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	0.944		0.403	0.409	5.00	0.555	pCi/L		09/25/22 18:57	1

# Client Sample Results

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

Job ID: 500-221301-2

**Client Sample ID: MW-08**  
**Date Collected: 08/25/22 12:42**  
**Date Received: 08/26/22 09:40**

**Lab Sample ID: 500-221301-10**  
**Matrix: Water**

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.412</b>		0.125	0.130	1.00	0.123	pCi/L	09/01/22 09:35	09/23/22 09:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					09/01/22 09:35	09/23/22 09:07	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.819</b>		0.349	0.357	1.00	0.451	pCi/L	09/01/22 10:07	09/13/22 13:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					09/01/22 10:07	09/13/22 13:44	1
Y Carrier	83.4		40 - 110					09/01/22 10:07	09/13/22 13:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Combined Radium 226 + 228</b>	<b>1.23</b>		0.371	0.380	5.00	0.451	pCi/L		09/25/22 18:57	1

# Definitions/Glossary

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

Job ID: 500-221301-2

## 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: 500-221301-2

## Rad

### Prep Batch: 580319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221301-1	MW-01	Total/NA	Water	PrecSep-21	
500-221301-2	MW-02	Total/NA	Water	PrecSep-21	
500-221301-3	MW-03	Total/NA	Water	PrecSep-21	
500-221301-4	MW-04	Total/NA	Water	PrecSep-21	
500-221301-5	MW-13	Total/NA	Water	PrecSep-21	
500-221301-6	MW-14	Total/NA	Water	PrecSep-21	
500-221301-7	MW-15	Total/NA	Water	PrecSep-21	
500-221301-8	DUPLICATE	Total/NA	Water	PrecSep-21	
500-221301-9	MW-07	Total/NA	Water	PrecSep-21	
500-221301-10	MW-08	Total/NA	Water	PrecSep-21	
MB 160-580319/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-580319/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-221301-1 DU	MW-01	Total/NA	Water	PrecSep-21	

### Prep Batch: 580328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221301-1	MW-01	Total/NA	Water	PrecSep_0	
500-221301-2	MW-02	Total/NA	Water	PrecSep_0	
500-221301-3	MW-03	Total/NA	Water	PrecSep_0	
500-221301-4	MW-04	Total/NA	Water	PrecSep_0	
500-221301-5	MW-13	Total/NA	Water	PrecSep_0	
500-221301-6	MW-14	Total/NA	Water	PrecSep_0	
500-221301-7	MW-15	Total/NA	Water	PrecSep_0	
500-221301-8	DUPLICATE	Total/NA	Water	PrecSep_0	
500-221301-9	MW-07	Total/NA	Water	PrecSep_0	
500-221301-10	MW-08	Total/NA	Water	PrecSep_0	
MB 160-580328/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-580328/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-221301-1 DU	MW-01	Total/NA	Water	PrecSep_0	



# QC Sample Results

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

Job ID: 500-221301-2

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

**Lab Sample ID: MB 160-580319/1-A**  
**Matrix: Water**  
**Analysis Batch: 583225**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 580319**

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.006435	U	0.0472	0.0472	1.00	0.0959	pCi/L	09/01/22 09:35	09/23/22 07:11	1
Carrier	MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	Qualifier	40 - 110					09/01/22 09:35	09/23/22 07:11	1
	96.8									

**Lab Sample ID: LCS 160-580319/2-A**  
**Matrix: Water**  
**Analysis Batch: 583225**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 580319**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	9.457		0.988	1.00	0.0927	pCi/L	83	75 - 125
Carrier	LCS	LCS	Limits						
Ba Carrier	%Yield	Qualifier	40 - 110						
	104								

**Lab Sample ID: 500-221301-1 DU**  
**Matrix: Water**  
**Analysis Batch: 583225**

**Client Sample ID: MW-01**  
**Prep Type: Total/NA**  
**Prep Batch: 580319**

Analyte	Sample		DU	DU	Total	RL	MDC	Unit	RER	RER
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					Limit
Radium-226	0.138		0.1808		0.105	1.00	0.141	pCi/L		0.23
Carrier	DU	DU	Limits							
Ba Carrier	%Yield	Qualifier	40 - 110							
	93.3									

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

**Lab Sample ID: MB 160-580328/1-A**  
**Matrix: Water**  
**Analysis Batch: 581987**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 580328**

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.3923	U	0.300	0.303	1.00	0.462	pCi/L	09/01/22 10:07	09/13/22 13:43	1
Carrier	MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	Qualifier	40 - 110					09/01/22 10:07	09/13/22 13:43	1
Y Carrier	85.6		40 - 110					09/01/22 10:07	09/13/22 13:43	1

# QC Sample Results

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

Job ID: 500-221301-2

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

**Lab Sample ID: LCS 160-580328/2-A**  
**Matrix: Water**  
**Analysis Batch: 581987**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 580328**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	8.28	9.034		1.19	1.00	0.404	pCi/L	109	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	104		40 - 110
Y Carrier	82.2		40 - 110

**Lab Sample ID: 500-221301-1 DU**  
**Matrix: Water**  
**Analysis Batch: 581987**

**Client Sample ID: MW-01**  
**Prep Type: Total/NA**  
**Prep Batch: 580328**

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.443	U	0.7318		0.369	1.00	0.507	pCi/L	0.42	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	93.3		40 - 110
Y Carrier	85.6		40 - 110

**Eurofins TestAmerica, Chicago**

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

**Chain of Custody Record**



Environ Teing  
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<b>Client Information</b>		Sampler: <u>IAN J. HANWESON</u>		Lab PM: Mockler Diana J		Carrier Tracking No(s):																					
Client Contact: Mitchel Dolan		Phone: <u>630-290-6850</u>		E-Mail: Diana Mockler@Eurofinset.com		State of Origin: 500-221301 COC																					
Company: KPRG and Associates Inc.		PWSID:		<b>Analysis Requested</b>				Job #: <u>500-221301</u>																			
Address: 14665 West Lisbon Road, Suite 1A		Due Date Requested:		Field Filtered Sample (Yes or No) <input type="checkbox"/> Perform MS/MSD (Yes or No) <input type="checkbox"/> 903.0, 904.0, Radium Combined <input type="checkbox"/> 6010C - Lithium, 6020A - Metals (13 elements), 7470A - Mercury <input type="checkbox"/> 2640C TDS, 4600FC - Fluoride <input type="checkbox"/> SM4500ClE Chloride, SM4500SO4E - Sulfate <input type="checkbox"/>				TAT Requested (days):		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 Z other (specify)																	
City: Brookfield		Compliance Project. <input type="checkbox"/> Yes <input type="checkbox"/> No																									
State/Zip: WI 53005		PO #: 4502041043																									
Phone: 262-781-0475		WO #:																									
Email: mitcheld@kprginc.com		Project #: 50011609																									
Project Name: Will County CCR 1N/1S		SSOW#:		Total Number of containers:				Other:																			
Site: Illinois																											
<b>Sample Identification</b>		<b>Sample Date</b>		<b>Sample Time</b>		<b>Sample Type (C=comp, G=grab)</b>		<b>Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)</b>		<b>Field Filtered Sample (Yes or No)</b>		<b>Perform MS/MSD (Yes or No)</b>		<b>903.0, 904.0, Radium Combined</b>		<b>6010C - Lithium, 6020A - Metals (13 elements), 7470A - Mercury</b>		<b>2640C TDS, 4600FC - Fluoride</b>		<b>SM4500ClE Chloride, SM4500SO4E - Sulfate</b>		<b>Preservation Codes:</b>		<b>Special Instructions/Note.</b>			
1 MW-01		8-24-22		09:10		W		W		N		X		X		X		X						5		*Metals List Sb,As,Ba,Be,B,Cd,Ca,Cr,Co,Pb,Mo,Se,Tl	
2 MW-02		8-24-22		10:42		W		W		N		X		X		X		X						5			
3 MW-03		8-24-22		12:18		W		W		N		X		X		X		X						5			
4 MW-04		8-24-22		13:26		W		W		N		X		X		X		X						5			
5 MW-13		8-23-22		14:00		W		W		N		X		X		X		X						5			
6 MW-14		8-23-22		12:52		W		W		N		X		X		X		X						5			
7 MW-15		8-23-22		11:57		W		W		N		X		X		X		X						5			
8 DUPLICATE		8-23-22		-		W		W		N		X		X		X		X						5			
<b>Possible Hazard Identification</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				<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>				<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: <u>8-24-22</u>		Time: <u>16:30</u>		Company: <u>KPRG</u>		Received by: <u>[Signature]</u>		Date/Time: <u>8/24/22 1630</u>		Company: <u>ETA</u>															
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: <u>4.1 → 2.8, 4.7 → 3.4</u>																							

24 → 11



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

# Chain of Custody Record



Environment Testing  
 America

<b>Client Information (Sub Contract Lab)</b>		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:				
Client Contact: Shipping/Receiving		Phone:	Mockler, Diana J	State of Origin: Illinois	500-164628.1				
Company: TestAmerica Laboratories, Inc.		E-Mail: Diana.Mockler@et.eurofins.com		Page:	Page 1 of 1				
Address: 13715 Rider Trail North, Clay Earth City State, Zip: MO, 63045		Accreditations Required (See note): NELAP - Illinois		Job #:	500-221301-2				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		Due Date Requested: 9/14/2022		<b>Preservation Codes:</b> 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:					
Email:		TAT Requested (days):		<b>Analysis Requested</b>					
Project #: 50011609		PO #:		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)					
Site: NRG Midwest Generation Will County		WO #:		Total Number of containers					
Sample Identification - Client ID (Lab ID)		SSOW#:		Special Instructions/Note:					
Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Preservation Code	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	90.0/PreSep_21 Standard Target List	90.0/PreSep_0 Standard Target List	Ra226Ra228_GFPc
MW-01 (500-221301-1)	8/24/22	09:10 Central	Water	Water	X	X	X	X	X
MW-02 (500-221301-2)	8/24/22	10:42 Central	Water	Water	X	X	X	X	X
MW-03 (500-221301-3)	8/24/22	12:18 Central	Water	Water	X	X	X	X	X
MW-04 (500-221301-4)	8/24/22	13:26 Central	Water	Water	X	X	X	X	X
MW-13 (500-221301-5)	8/24/22	14:00 Central	Water	Water	X	X	X	X	X
MW-14 (500-221301-6)	8/24/22	12:52 Central	Water	Water	X	X	X	X	X
MW-15 (500-221301-7)	8/24/22	11:57 Central	Water	Water	X	X	X	X	X
DUPLICATE (500-221301-8)	8/24/22	Central	Water	Water	X	X	X	X	X
<p>Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte &amp; accreditation compliance upon out 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/testis/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.</p>									
<p><b>Possible Hazard Identification</b>          Unconfirmed          Deliverable Requested: I, II, III, IV, Other (specify) _____          Empty Kit Relinquished by: _____          Date: _____ Time: _____ Method of Shipment: _____          Primary Deliverable Rank: 2          Special Instructions/QC Requirements: _____          Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months</p>									
<p>Relinquished by: <i>Sophiane Himmady</i> Date/Time: <i>8/15/22 1430</i> Company: <i>EEIA</i>          Relinquished by: <i>FED EX</i> Date/Time: _____ Company: _____          Relinquished by: _____ Date/Time: _____ Company: _____          Relinquished by: <i>Sana Weethigan</i> Date/Time: <i>AUG 26 2022 1230</i> Company: <i>EEIA</i>          Relinquished by: _____ Date/Time: _____ Company: _____</p>									
Custody Seals Intact: <input type="checkbox"/> Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: _____									





# Environment Testing America



500-221304 Login  
PM: Mockler, Diana J  
Company: Midwest Generation EME 1

## CONDITION UPON RECEIPT FORM

Client: Chicago

Initiated by: SW Date: 8-26-22 Time: 1230 Shipper: FE Package Quantity: 2

Completed by: SW

Sample must be received at < 6°C for Wet Chem and Mercury. If not, note temp below.  
Metal soil samples must be refrigerated upon receipt.  
If samples are from West Virginia, please fill out form ADMIN-0031.

Thermometer ID (°C): IR-2

Thermometer CF (°C): -0.4

	Shipping #(s)	Package Temp (°C)	Document #:
1.	<u>1893 4459 3911</u>	<u>16.3</u>	
2.	<u>3922</u>	<u>17.7</u>	
3.			
4.			
5.			
6.			
7.			

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	<input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on the cooler?	8.	<input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on bottles?
2.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on cooler appear to be tampered with?	9.	<input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Do custody seals on bottles appear to be tampered with?
3.	<input checked="" type="radio"/> Y <input type="radio"/> N	Were contents of cooler frisked after opening, but before unpacking?	10.	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was sample received with proper pH? (If not, make note below) pH strip lot #: <u>HC291590</u>
4.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample received with Chain of Custody?	11.	<input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Containers for Rn-222, C-14, Cl-36, H-3 & I-129/131 marked with "Do Not Preserve" label?
5.	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Does the Chain of Custody match sample ID's on the container(s)?	12.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in proper containers?
6.	<input type="radio"/> Y <input checked="" type="radio"/> N	Was sample received broken?	13.	<input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Headspace in VOA, or Rn-222 liquid samples? (>6mm) (If Yes, note sample ID's below)
7.	<input checked="" type="radio"/> Y <input type="radio"/> N	Is sample volume sufficient for analysis?	14.	<input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Soil containers for C-14, H-3, Tc-99 & I-129/131 marked with "Do Not Dry" label?

<sup>1</sup> For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, Rn-222 and soils.

Notes:

<b>pH Adjustment (if needed)</b>	Date/Time of Preservation:
Initial pH and pH strip lot#:	Preservative and lot#:
Final pH and pH strip lot#:	Amount of Preservative:



# Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-221301-2

**Login Number: 221301**

**List Number: 1**

**Creator: James, Jeff A**

**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	2.8,3.4,1.1,1.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (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: 500-221301-2

**Login Number: 221301**

**List Number: 2**

**Creator: Worthington, Sierra M**

**List Source: Eurofins St. Louis**

**List Creation: 08/26/22 04:14 PM**

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.	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	

# Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-221301-2

**Login Number: 221301**

**List Number: 3**

**Creator: Bohlmann, Jessica M**

**List Source: Eurofins St. Louis**

**List Creation: 08/29/22 10:46 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?	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 (RAD)

Job ID: 500-221301-2

## Client Sample ID: MW-01

Date Collected: 08/24/22 09:10

Date Received: 08/24/22 16:30

## Lab Sample ID: 500-221301-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			580319	BMP	EET SL	09/01/22 09:35
Total/NA	Analysis	903.0		1	583225	FLC	EET SL	09/23/22 07:11
Total/NA	Prep	PrecSep_0			580328	BMP	EET SL	09/01/22 10:07
Total/NA	Analysis	904.0		1	581987	FLC	EET SL	09/13/22 13:43
Total/NA	Analysis	Ra226_Ra228		1	583429	CLP	EET SL	09/25/22 18:57

## Client Sample ID: MW-02

Date Collected: 08/24/22 10:42

Date Received: 08/24/22 16:30

## Lab Sample ID: 500-221301-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			580319	BMP	EET SL	09/01/22 09:35
Total/NA	Analysis	903.0		1	583225	FLC	EET SL	09/23/22 07:11
Total/NA	Prep	PrecSep_0			580328	BMP	EET SL	09/01/22 10:07
Total/NA	Analysis	904.0		1	581987	FLC	EET SL	09/13/22 13:43
Total/NA	Analysis	Ra226_Ra228		1	583429	CLP	EET SL	09/25/22 18:57

## Client Sample ID: MW-03

Date Collected: 08/24/22 12:18

Date Received: 08/24/22 16:30

## Lab Sample ID: 500-221301-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			580319	BMP	EET SL	09/01/22 09:35
Total/NA	Analysis	903.0		1	583225	FLC	EET SL	09/23/22 07:11
Total/NA	Prep	PrecSep_0			580328	BMP	EET SL	09/01/22 10:07
Total/NA	Analysis	904.0		1	581987	FLC	EET SL	09/13/22 13:43
Total/NA	Analysis	Ra226_Ra228		1	583429	CLP	EET SL	09/25/22 18:57

## Client Sample ID: MW-04

Date Collected: 08/24/22 13:26

Date Received: 08/24/22 16:30

## Lab Sample ID: 500-221301-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			580319	BMP	EET SL	09/01/22 09:35
Total/NA	Analysis	903.0		1	583225	FLC	EET SL	09/23/22 07:11
Total/NA	Prep	PrecSep_0			580328	BMP	EET SL	09/01/22 10:07
Total/NA	Analysis	904.0		1	581987	FLC	EET SL	09/13/22 13:44
Total/NA	Analysis	Ra226_Ra228		1	583429	CLP	EET SL	09/25/22 18:57

# Lab Chronicle

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

Job ID: 500-221301-2

## Client Sample ID: MW-13

Date Collected: 08/24/22 14:00

Date Received: 08/24/22 16:30

## Lab Sample ID: 500-221301-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			580319	BMP	EET SL	09/01/22 09:35
Total/NA	Analysis	903.0		1	583225	FLC	EET SL	09/23/22 07:12
Total/NA	Prep	PrecSep_0			580328	BMP	EET SL	09/01/22 10:07
Total/NA	Analysis	904.0		1	581987	FLC	EET SL	09/13/22 13:44
Total/NA	Analysis	Ra226_Ra228		1	583429	CLP	EET SL	09/25/22 18:57

## Client Sample ID: MW-14

Date Collected: 08/24/22 12:52

Date Received: 08/24/22 16:30

## Lab Sample ID: 500-221301-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			580319	BMP	EET SL	09/01/22 09:35
Total/NA	Analysis	903.0		1	583225	FLC	EET SL	09/23/22 07:12
Total/NA	Prep	PrecSep_0			580328	BMP	EET SL	09/01/22 10:07
Total/NA	Analysis	904.0		1	581987	FLC	EET SL	09/13/22 13:44
Total/NA	Analysis	Ra226_Ra228		1	583429	CLP	EET SL	09/25/22 18:57

## Client Sample ID: MW-15

Date Collected: 08/24/22 11:57

Date Received: 08/24/22 16:30

## Lab Sample ID: 500-221301-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			580319	BMP	EET SL	09/01/22 09:35
Total/NA	Analysis	903.0		1	583225	FLC	EET SL	09/23/22 09:06
Total/NA	Prep	PrecSep_0			580328	BMP	EET SL	09/01/22 10:07
Total/NA	Analysis	904.0		1	581987	FLC	EET SL	09/13/22 13:44
Total/NA	Analysis	Ra226_Ra228		1	583429	CLP	EET SL	09/25/22 18:57

## Client Sample ID: DUPLICATE

Date Collected: 08/24/22 00:00

Date Received: 08/24/22 16:30

## Lab Sample ID: 500-221301-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			580319	BMP	EET SL	09/01/22 09:35
Total/NA	Analysis	903.0		1	583225	FLC	EET SL	09/23/22 09:07
Total/NA	Prep	PrecSep_0			580328	BMP	EET SL	09/01/22 10:07
Total/NA	Analysis	904.0		1	581987	FLC	EET SL	09/13/22 13:44
Total/NA	Analysis	Ra226_Ra228		1	583429	CLP	EET SL	09/25/22 18:57

# Lab Chronicle

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

Job ID: 500-221301-2

**Client Sample ID: MW-07**

**Date Collected: 08/25/22 11:28**

**Date Received: 08/26/22 09:40**

**Lab Sample ID: 500-221301-9**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			580319	BMP	EET SL	09/01/22 09:35
Total/NA	Analysis	903.0		1	583225	FLC	EET SL	09/23/22 09:07
Total/NA	Prep	PrecSep_0			580328	BMP	EET SL	09/01/22 10:07
Total/NA	Analysis	904.0		1	581987	FLC	EET SL	09/13/22 13:44
Total/NA	Analysis	Ra226_Ra228		1	583429	CLP	EET SL	09/25/22 18:57

**Client Sample ID: MW-08**

**Date Collected: 08/25/22 12:42**

**Date Received: 08/26/22 09:40**

**Lab Sample ID: 500-221301-10**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			580319	BMP	EET SL	09/01/22 09:35
Total/NA	Analysis	903.0		1	583225	FLC	EET SL	09/23/22 09:07
Total/NA	Prep	PrecSep_0			580328	BMP	EET SL	09/01/22 10:07
Total/NA	Analysis	904.0		1	581987	FLC	EET SL	09/13/22 13:44
Total/NA	Analysis	Ra226_Ra228		1	583429	CLP	EET SL	09/25/22 18:57

**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: 500-221301-2

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

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (40-110)	
500-221301-1	MW-01	98.3	
500-221301-1 DU	MW-01	93.3	
500-221301-2	MW-02	99.5	
500-221301-3	MW-03	99.0	
500-221301-4	MW-04	100	
500-221301-5	MW-13	64.4	
500-221301-6	MW-14	96.5	
500-221301-7	MW-15	97.8	
500-221301-8	DUPLICATE	71.6	
500-221301-9	MW-07	79.5	
500-221301-10	MW-08	96.5	
LCS 160-580319/2-A	Lab Control Sample	104	
MB 160-580319/1-A	Method Blank	96.8	

**Tracer/Carrier Legend**  
 Ba = Ba Carrier

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

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (40-110)	Y (40-110)
500-221301-1	MW-01	98.3	80.7
500-221301-1 DU	MW-01	93.3	85.6
500-221301-2	MW-02	99.5	84.1
500-221301-3	MW-03	99.0	83.4
500-221301-4	MW-04	100	79.3
500-221301-5	MW-13	64.4	83.7
500-221301-6	MW-14	96.5	82.6
500-221301-7	MW-15	97.8	81.1
500-221301-8	DUPLICATE	71.6	80.4
500-221301-9	MW-07	79.5	82.2
500-221301-10	MW-08	96.5	83.4
LCS 160-580328/2-A	Lab Control Sample	104	82.2
MB 160-580328/1-A	Method Blank	96.8	85.6

**Tracer/Carrier Legend**  
 Ba = Ba Carrier  
 Y = Y Carrier

PROJECT NAME	NRG - WILL COUNTY STATION (12313.3)		DATE	8-24-22
Sample Name	MW-01	Start Time	08:58	
Condition of Well	GOOD			
Water Level	10.58	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	APPEARS CLEAR	
Volume Removed	4.5 QTS	W L at Sample Time	10.63	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCA + CCR + CCA DUPS	Sample Time	09:10 CT	
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)
09:01	10.60	6.96	16.5	1.654	3.80	149.8	13.3
09:04	10.58	6.58	16.4	1.665	1.52	156.5	19.6
09:07	10.64	6.51	16.8	1.663	1.27	155.0	18.0
09:10	10.63	6.51	16.9	1.667	1.22	152.7	15.3

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates



IAN S. HOWIESON


PROJECT NAME	NRG - WILL COUNTY STATION (12313.3)		DATE	8-24-22
Sample Name	MW-02	Start Time	10:30	
Condition of Well	GOOD			
Water Level	11.74	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	APPEARS CLEAR	
Volume Removed	4.5 QTS	W L at Sample Time	11.76	
Method of Sample	Low-Flow	Sample Characteristics	APPEAR CLEAR	
Sample Analysis	CCA + CCR	Sample Time	10:42 CT	
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)
10:33	11.78	7.92	17.9	1.634	2.89	-133.3	12.90
10:36	11.76	7.84	17.8	1.633	2.07	-139.8	12.64
10:39	11.78	7.76	17.7	1.632	1.50	-146.9	12.04
10:42	11.76	7.73	17.6	1.628	1.27	-149.4	8.71

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

 IAN, J. HOWIESON



PROJECT NAME	NRG - WILL COUNTY STATION (12313.3)		DATE	8-24-22
Sample Name	MW-03	Start Time	12:06	
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	APPEARS CLEAR	
Volume Removed	4.5 Qrs	W L at Sample Time	11.93	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCA + CCR	Sample Time	12:18 CT	
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)
12:09	11.96	6.90	15.8	1.555	1.87	-45.5	5.03
12:12	11.97	6.78	15.8	1.562	1.55	-31.8	5.18
12:15	11.98	6.74	15.9	1.559	1.36	-23.0	5.83
12:18	12.02	6.73	15.9	1.562	1.26	-19.8	6.39

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates



IAN J. HOWIESON

PROJECT NAME	NRG - WILL COUNTY STATION (12313.3)		DATE	8-24-22
Sample Name	MW-04	Start Time	13:11	
Condition of Well	GOOD			
Water Level	11.34	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	APPEARS CLEAR	
Volume Removed	5.0 QTS	W L at Sample Time	11.62	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCA + CCR	Sample Time	13:26 CT	
Water Quality Meter	YSI ProDss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
13:14	11.47	7.08	16.5	2.503	3.11	-45.0	12.96
13:17	11.59	6.71	16.4	2.380	1.45	-51.1	10.18
13:20	11.64	6.62	16.3	2.362	1.19	-59.3	7.39
13:23	11.62	6.59	16.4	2.353	1.12	-63.3	5.48
13:26	11.62	6.57	16.3	2.358	1.10	-64.0	4.70

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates



I.A.J. HOWIESON

PROJECT NAME	NRG - WILL COUNTY STATION (12313.3)		DATE	8-25-22
Sample Name	MW-07	Start Time	11:10	
Condition of Well	Good			
Water Level	11.66	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	APPEARS CLEAR	
Volume Removed	6 GRS	W L at Sample Time	12.16	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCA+CCR	Sample Time	11:28 CT	
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)
11:13	11.92	7.35	15.3	1.781	4.28	-86.5	2.28
11:16	12.02	7.47	15.0	1.692	2.21	-93.8	2.49
11:19	12.12	7.85	14.9	1.669	1.43	-133.9	2.28
11:22	12.14	7.93	14.9	1.667	1.26	-146.8	2.21
11:25	12.16	7.94	14.9	1.666	1.16	-156.2	2.36
11:28	12.16	7.90	14.9	1.662	1.11	-156.0	2.27

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

*[Signature]* IAN S. HOWLSON


PROJECT NAME	NRG - WILL COUNTY STATION (12313.3)		DATE	8-25-22
Sample Name	MW-08	Start Time	12:30	
Condition of Well	GOOD			
Water Level	11.92	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	TRACE TURBIDITY	
Volume Removed	4.5 GALS	W L at Sample Time	12.41	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCA + CCR	Sample Time	12:42 CT	
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)
12:33	12.46	7.03	16.1	1.861	1.77	-70.3	26.33
12:36	12.35	6.98	16.2	1.818	1.26	-73.0	17.92
12:39	12.47	6.96	16.2	1.799	1.17	-73.2	10.96
12:42	12.41	6.95	16.2	1.793	1.14	-73.4	9.02

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

 IAN J. HOWIESON

PROJECT NAME	NRG - WILL COUNTY STATION (12313.3)		DATE	8-23-22
Sample Name	MW-13	Start Time	13:35	
Condition of Well	Good			
Water Level	10.98	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	CLOUDY	
Volume Removed	6 QTS	W L at Sample Time	11.38	
Method of Sample	Low-Flow	Sample Characteristics	SLIGHT TINT	
Sample Analysis	CCR + DUPLICATE	Sample Time	14:00 ET	
Water Quality Meter	YSI ProDss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
13:39	10.98	7.67	20.3	1.812	6.16	85.4	509.2
13:42		7.31	19.0	1.770	3.60	102.2	439.3
13:45	11.03	7.13	18.7	1.750	2.48	108.4	431.4
13:48		7.03	18.5	1.691	3.27	112.3	294.3
13:51	11.14	6.98	18.6	1.634	4.58	115.8	192.4
13:54		6.95	18.8	1.609	5.14	118.3	130.7
13:57	11.26	6.92	18.7	1.592	5.42	121.5	84.7
14:00		6.92	19.1	1.582	5.48	122.9	47.3

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates



IAN S. HOWIESON


PROJECT NAME	NRG - WILL COUNTY STATION (12313.3)		DATE	8-23-22
Sample Name	MW-14	Start Time	12:38	
Condition of Well	GOODS			
Water Level	11.07	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	APPEARS CLEAR	
Volume Removed	4.5 GALS	WL at Sample Time	11.14	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCR	Sample Time	12:52 CT	
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)
12:40	11.16	8.02	19.2	1.601	2.53	-121.9	2.23
12:43	—	8.05	19.7	1.514	1.33	-165.4	2.86
12:46	11.17	7.89	20.4	1.526	1.20	-166.5	2.93
12:49	—	7.74	21.0	1.573	1.15	-158.6	2.70
12:52	11.14	7.72	21.2	1.598	1.14	-157.1	2.71

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

 IAN S. HOWIESEN


PROJECT NAME	NRG - WILL COUNTY STATION (12313.3)		DATE	8-23-22
Sample Name	MW-15 CCR	Start Time	11:37	
Condition of Well	GOOD			
Water Level	10.61	Total Depth	—	
Well Diameter	PVC - 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	Cloudy - CLEAR	
Volume Removed	1G	W L at Sample Time	11.23	
Method of Sample	Low-Flow	Sample Characteristics	APPEAR CLEAR	
Sample Analysis	CCR	Sample Time	11:57 CT	
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	10.61	7.73	15.7	1.933	1.70	-80.0	109.4
11:48	11.07	7.20	15.9	1.895	1.33	-79.8	80.1
11:51	—	7.08	15.8	1.890	1.27	-74.1	55.0
11:54	11.27	6.97	15.7	1.882	1.24	-65.0	40.4
11:57	—	6.90	15.8	1.875	1.22	-60.2	33.2

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

 IAN S. HOWERSON