DATA SUMMARY POSTING

Station: Midwest Generation Joliet #29 Generating Station

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

In accordance with the new Ill. Adm. Code Title 35, Part 845: Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments (State CCR Rule) groundwater monitoring was completed during the 3rd quarter 2021 which includes the entire list of parameters specified under Section 845.600(a)(1) and (b). Table 1 is a summary table of all available CCR monitoring data to date including any data generated previously as part of the Federal CCR Rule monitoring. In addition, Table 2 provides a summary of turbidity data which was collected as part of State CCR Rule requirements which is a data parameter that was not required under the Federal CCR Rule.

No background statistics or proposed Groundwater Protection Standards are included on these tables as they will be calculated and proposed as part of the Operating Permit submittals due by October 31, 2021. Upon Illinois Environmental Protection Agency approval of the Operating Permit, the approved comparison values will be included for subsequent data comparisons/evaluations.

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

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228	Selenium	Thallium
MW-10 up-gradient	10/28/2015	0.47	100	200	0.41	7.04	84	790	< 0.003	< 0.001	0.041	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.41	< 0.0005	0.013	< 0.0002	0.0060	0.2981	< 0.0025	< 0.002
	2/10/2016	0.41	100	210	0.44	7.17	120	820	< 0.003	0.001	0.043	< 0.001	< 0.0005	< 0.005	< 0.001	0.44	< 0.0005	0.011	< 0.0002	0.0067	< 0.438	< 0.0025	< 0.002
	5/12/2016	0.29	100	300	0.42	7.02	110	920	< 0.003	< 0.001	0.046	< 0.001	< 0.0005	< 0.005	< 0.001	0.42	< 0.0005	0.012	< 0.0002	0.0051	< 0.414	< 0.0025	< 0.002
	8/31/2016	0.36	89	170	0.46	6.95	100	760	< 0.003	< 0.001	0.039	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.46	< 0.0005	0.010	< 0.0002	0.0077	< 0.394	< 0.0025	< 0.002
	11/2/2016	0.48	100	130	0.45	6.99	95	720	< 0.003	0.0018	0.035	< 0.001	< 0.0005	< 0.005	< 0.001	0.45	0.0014	0.011	< 0.0002	0.0061	0.626	< 0.0025	< 0.002
	2/6/2017	0.44	120	190	0.36	6.99	88	820	< 0.003	0.0011	0.048	< 0.001	< 0.0005	< 0.005	< 0.001	0.36	0.00086	0.014	< 0.0002	0.0056	< 0.389	< 0.0025	< 0.002
	4/26/2017	0.35	120	200	0.35	7.27	87	760	< 0.003	0.0015	0.046	< 0.001	< 0.0005	< 0.005	< 0.001	0.35	0.0012	< 0.01	< 0.0002	0.006	< 0.34	< 0.0025	< 0.002
	6/14/2017	0.29	91	160	0.43	7.48	75	690	< 0.003	< 0.001	0.034	< 0.001	< 0.0005	< 0.005	< 0.001	0.43	< 0.0005	0.012	< 0.0002	0.0072	< 0.356	< 0.0025	< 0.002
	8/2/2017	0.45	97	170	0.38	7.23	110	750	< 0.003	0.0011	0.036	< 0.001	< 0.0005	< 0.005	< 0.001	0.38	< 0.0005	0.011	< 0.0002	0.0079	0.429	< 0.0025	< 0.002
	10/18/2017	0.61	120	140	0.41	7.11	130	820	< 0.003	0.0012	0.04	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.41	0.00059	0.013	< 0.0002	0.0066	< 0.422	< 0.0025	^ < 0.002
	4/24/2018	0.4	110	260	0.39	7.28	120	910	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/17/2018	0.63	120	180	0.42	7.30	110	810	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/24/2018 R	0.44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/7/2019	0.56	130	410	0.39	7.17	95	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/3/2019 R	NA	NA	230	NA	NA	NA	830	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/7/2019	0.35	90	130	0.36	7.40	59	650	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/20/2020	0.85	120	250	0.41	6.90	100	960	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/11/2020 R	0.26	NA	NA	NA	NA	NA	770	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/22/2020	0.34	110	230	0.41	7.11	93	850	< 0.003	0.001	0.043	< ^ 0.001	< 0.0005	< 0.005	< 0.001	0.41	< 0.0005	0.011	< 0.0002	0.0057	NA	< 0.0025	< 0.002
	5/18/2021	0.33	140	350	0.39	7.16	210	1,200	< 0.003	0.0014	0.06	< 0.001	< 0.0005	< 0.005	< 0.001	0.39	< 0.0005	0.015	< 0.0002	0.0055	< 0.4800	< 0.0025	< 0.002
	6/29/2021 R	NA	160	420	NA	7.32	190	1,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/30/2021	0.28	120	330	0.37	7.56	170	990	< ^+ 0.003	0.0012	0.051	< 0.001	< 0.0005	< 0.005	< 0.001	0.37	< 0.0005	0.012	< 0.0002	0.0065	0.51	< 0.0025	< 0.002
MW-03 down-gradient	10/28/2015	0.34	110	230	0.41	7.11	110	960	< 0.003	0.0015	0.100	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.41	< 0.0005	0.013	< 0.0002	< 0.0050	0.41	< 0.0025	< 0.002
	2/10/2016	0.49	100	220	0.44	7.31	130	790	< 0.003	0.0017	0.100	< 0.001	< 0.0005	< 0.005	< 0.001	0.44	< 0.0005	0.011	< 0.0002	0.0060	< 1.68	0.0045	< 0.002
	5/10/2016	0.48	95	240	0.44	7.07	130	800	< 0.003	0.0011	0.095	< 0.001	< 0.0005	< 0.005	< 0.001	0.44	< 0.0005	0.012	< 0.0002	0.0062	< 0.326	0.0030	< 0.002
	8/31/2016	0.49	100	250	0.45	7.18	120	920	< 0.003	0.0013	0.095	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.45	< 0.0005	0.012	< 0.0002	0.0086	< 0.373	0.0051	< 0.002
	11/2/2016	0.34	87	190	0.44	7.45	94	780	< 0.003	0.0019	0.082	< 0.001	< 0.0005	< 0.0051	< 0.001	0.44	< 0.0005	< 0.010	< 0.0002	0.0059	0.965	0.0032	< 0.002
	2/6/2017	0.40	97	140	0.39	7.35	77	720	< 0.003	0.0019	0.093	< 0.001	< 0.0005	< 0.005	< 0.001	0.39	< 0.0005	0.012	< 0.0002	0.0066	< 0.356	0.0028	< 0.002
	4/26/2017	0.54	100	210	0.36	7.03	120	820	< 0.003	0.0017	0.11	< 0.001	< 0.0005	< 0.005	< 0.001	0.36	< 0.0005	0.010	< 0.0002	0.0088	< 0.411	0.0052	< 0.002
	6/14/2017	0.45	88	190	0.44	7.43	75	760	< 0.003	0.0014	0.09	< 0.001	< 0.0005	< 0.005	< 0.001	0.44	< 0.0005	0.012	< 0.0002	0.0072	< 0.358	0.0037	< 0.002
	8/2/2017	0.41	99	200	0.40	7.34	110	850	< 0.003	0.0022	0.10	< 0.001	< 0.0005	< 0.005	< 0.001	0.40	< 0.0005	0.011	< 0.0002	0.0065	0.414	0.005	< 0.002
	10/18/2017	0.35	93	160	0.42	7.11	100	850	< 0.003	0.0015	0.088	< ^ 0.001	< 0.0005	< 0.005	< 0.001	0.42	< 0.0005	0.012	< 0.0002	0.0055	< 0.417	0.0026	^ < 0.002
	4/24/2018	0.52	100	220	0.42	7.2	150	930	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/31/2018 R	NA	NA	NA	NA	NA	110	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/17/2018	0.25	100	250	0.4	7.04	110	870	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/7/2019	0.43	120	280	0.4	7.27	140	880	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/3/2019 R	NA	NA	NA	NA	NA	65	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/7/2019	0.34	100	150	0.4	7.32	65	660	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/20/2020	0.38	100	230	0.42	7.56	78	960	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/11/2020 R	NA	NA	NA	NA	NA	NA	930	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/22/2020	0.32	110	180	0.43	7.23	90	770	< 0.003	0.0014	0.1	<^ 0.001	< 0.0005	< 0.005	< 0.001	0.43	< 0.0005	0.01	< 0.0002	< 0.005	NA	< 0.0025	< 0.002
	5/18/2021	0.28	130	290	0.4	7.13	190	1,200	< 0.003	0.0016	0.14	< 0.001	< 0.0005	< 0.005	0.0011	0.4	< 0.0005	0.014	< 0.0002	< 0.0050	1.1000	< 0.0025	< 0.002
	6/29/2021 R	NA	NA	NA	NA	7.34	210	1,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/30/2021	0.23	120	290	0.36	7.33	140	800	< ^+ 0.003	0.0018	0.12	< 0.001	< 0.0005	< 0.005	0.0014	0.36	< 0.0005	0.012	< 0.0002	< 0.005	0.641	< 0.0025	< 0.002
MW-04 down-gradient	10/28/2015	0.34	94	F1 200	0.45	7.07	83	740	< 0.003	0.0013	0.082	^ < 0.001	< 0.0005	< 0.005	0.0063	0.45	< 0.0005	0.013	< 0.0002	0.0065	0.741	< 0.0025	< 0.002
	2/10/2016	0.32	97	210	0.47	7.22	140	810	< 0.003	0.0018	0.088	< 0.001	< 0.0005	< 0.005	0.0074	0.47	0.00062	0.011	< 0.0002	0.0063	< 1.52	< 0.0025	< 0.002
	5/10/2016	0.47	100	260	0.46	6.71	150	900	< 0.003	0.0014	0.088	< 0.001	< 0.0005	< 0.005	0.0086	0.46	< 0.0005	0.012	< 0.0002	0.0088	< 0.365	< 0.0025	< 0.002
	8/31/2016	0.42	100	210	0.45	7.07	120	890	< 0.003	0.0014	0.086	^ < 0.001	< 0.0005	< 0.005	0.0035	0.45	< 0.0005	0.011	< 0.0002	0.0083	0.432	< 0.0025	< 0.002
	11/2/2016	0.32	98	160	0.43	7.25	83	750	< 0.003	0.0025	0.079	< 0.001	< 0.0005	< 0.005	0.0100	0.43	0.0012	0.012	< 0.0002	0.007	< 0.463	< 0.0025	< 0.002
	2/6/2017	0.40	110	200	0.37	7.19	98	790	< 0.003	0.0015	0.100	< 0.001	< 0.0005	< 0.005	0.0160	0.37	< 0.0005	0.013	< 0.0002	0.0071	< 0.356	< 0.0025	< 0.002
	4/26/2017	0.33	100	220	0.37	7.46	89	770	< 0.003	0.0021	0.095	< 0.001	< 0.0005	< 0.005	0.0078	0.37	0.00055	0.012	< 0.0002	0.0069	< 0.35	< 0.0025	< 0.002
	6/14/2017	0.37	92	190	0.47	7.45	80	770	< 0.003	0.0013	0.078	< 0.001	< 0.0005	< 0.005	0.0120	0.47	< 0.0005	0.013	< 0.0002	0.0085	< 0.309	< 0.0025	< 0.002
	8/2/2017	0.35	93	180	0.43	7.41	100	770	< 0.003	0.0013	0.077	< 0.001	< 0.0005	0.04	0.0031	0.43	< 0.0005	0.012	< 0.0002	0.0091	< 0.282	0.0029	< 0.002
	10/18/2017	0.54	97	140	0.45	7.2	120	790	< 0.003	0.0019	0.082	^ < 0.001	< 0.0005	< 0.005	0.0046	0.45	0.00077	0.015	< 0.0002	0.0071	0.423	0.003	^ < 0.002
	4/24/2018	0.4	110	240	0.43	7.21	160	940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/31/2018 R	NA	NA	NA	NA	NA	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/17/2018	0.29	100	230	0.45	7.2	130	840	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/7/2019	0.76	120	340	0.42	7.27	120	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/3/2019 R	0.23	NA	250	NA	NA	NA	870	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/6/2019	0.3	77	140	0.41	7.33	53	670	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/20/2020	0.79	110	250	0.45	7.3	110	1,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/11/2020 R	0.28	NA	NA	NA	NA	NA	850	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/22/2020	0.33	100	190	0.48	7.15	83	770	< 0.003	0.0015	0.089	< ^ 0.001	< 0.0005	< 0.005	0.0082	0.48	< 0.0005	0.013	< 0.0002	0.0061	NA	< 0.0025	< 0.002
	5/18/2021	0.22	120	280	0.42	7.3	190	1,100	< 0.003	0.0019	0.12	< 0.001	< 0.0005	< 0.005	0.0037	0.42	< 0.0005	0.014	< 0.0002	< 0.005	< 0.4450	< 0.0025	< 0.002
	6/29/2021 R	NA	NA	NA	NA	7.36	190	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/30/2021	0.33	120	330	0.4	7.46	170	1,000	<^+ 0.003	0.0016	0.12	< 0.001	< 0.0005	< 0.005	0.0034	0.4	< 0.0005	0.013	< 0.0002	0.0057	0.877	0.003	< 0.002
MW-05 down-gradient	10/28/2015	0.64	100	160	0.39	7.12	120	790	< 0.003	0.0011	0.057	^ < 0.001	< 0.0005	< 0.005	0.0013	0.39	< 0.0005	0.018	< 0.0002	0.0088	0.6231	0.0031	< 0.002
	2/10/2016	0.46	110	220	0.39	7.25	120	790	< 0.003	0.0028	0.071	< 0.001	< 0.0005	0.0062	0.0013	0.39	0.0022	< 0.02	< 0.0002	F1 0.0053	1.09	< 0.0025	< 0.002
	5/10/2016	0.8	150	220	0.46	6.88	290	950	< 0.003	0.0023	0.075	< 0.001	< 0.0005	< 0.005	< 0.001	0.46	0.0022	0.014	< 0.0002	0.008	< 0.40	0.019	< 0.002
	8/31/2016	1.0	140	99	0.56	6.81	260	820	< 0.003	< 0.001	0.07	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.56	< 0.0005	< 0.01	< 0.0002	0.012	< 0.42	0.02	< 0.002
	11/2/2016	0.41	98	130	0.37	7.26	100	700	< 0.003	0.0022	0.056	< 0.001	< 0.0005	0.0051	< 0.001	0.37	0.0017	0.015	< 0.0002	0.0061	0.438	< 0.0025	< 0.002
	2/6/2017	0.48	150	180	0.30	7.22	120	790	< 0.003	0.0016	0.082	< 0.001	< 0.0005	< 0.005	< 0.001	0.30	0.0016	0.021	< 0.0002	< 0.005	0.564	0.0029	< 0.002
	4/26/2017	0.67	110	F1 190	0.37	7.28	170	770	< 0.003	0.0014	0.063	< 0.001	< 0.0005	< 0.005	< 0.001	0.37	0.0008	< 0.01	< 0.0002	0.0066	< 0.411	0.013	< 0.002
	6/14/2017	0.44	75	150	0.46	7.47	110	670	< 0.003	0.0012	0.044	< 0.001	< 0.0005	< 0.005	< 0.001	0.46	< 0.0005	0.013	< 0.0002	0.0076	< 0.316	0.0029	< 0.002
	8/2/2017	0.28	83	170	0.35	7.30	99	770	< 0.003	< 0.001	0.054	< 0.001	< 0.0005	< 0.005	< 0.001	0.35	< 0.0005	0.014	< 0.0002	0.0053	0.659	< 0.0025	< 0.002
	10/18/2017	0.42	110	110	0.38	7.16	95	720	< 0.003	0.002	0.067	< ^ 0.001	< 0.0005	< 0.005	< 0.001	0.38	0.0023	0.018	< 0.0002	< 0.005	< 0.371	0.0029	^ < 0.002
	4/24/2018	0.31	110	300	0.34	7.33	130	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/31/2018 R	NA	NA	NA	NA	NA	NA	940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/17/2018	0.31	110	210	0.36	7.29	93	810	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/6/2019	0.38	130	500	0.31	7.11	84	1,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/3/2019 R	NA	NA	150	NA	NA	NA	890	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/7/2019	0.31	180	130	0.3	7.44	64	590	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/4/2019 R	NA	89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/20/2020	0.32	100	270	0.37	7.03	67	890	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/22/2020	0.52	92	180	0.38	7.16	85	720	< 0.003	0.0012	0.069	<^ 0.001	< 0.0005	< 0.005	< 0.001	0.38	< 0.0005	0.013	< 0.0002	0.0054	NA	0.003	< 0.002
	5/18/2021	0.37	130	410	0.3	7.00	160	1,300	< 0.003	0.0015	0.1	< 0.001	< 0.0005	< 0.0050	< 0.0010	0.3	< 0.0005	0.023	< 0.0002	< 0.005	< 0.5970	< 0.0025	< 0.002
	6/29/2021 R	NA	NA	430	NA	7.33	150	1,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/27/2021	0.36	100	300	0.3	6.94	140	960	< ^+ 0.003	0.0014	0.069	< 0.001	< 0.0005	< 0.005	< 0.001	0.3	< 0.0005	0.015	< 0.0002	< 0.005	0.528	0.0027	< 0.002

Notes: All units are in mg/l except pH is in standard units and radium is in pCi/L

DNYA - Data not yet available.

F1 - MS and/or MSD Recovery outside of limits.

NA - Not analyzed. No confirmation resample required.

^+ - Continuing calibration verification is outside acceptance limits, high biased.

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

Well ID	Date	Turbidity (NTU)
MW-03	3/2/2021	0.45
	4/10/2021	22.9
	4/25/2021	2.40
	5/18/2021	2.53
	6/11/2021	2.34
	6/29/2021	2.86
	7/19/2021	37.40
	8/9/2021	2.71
	8/30/2021	5.70
	9/27/2021	10.27
MW-04	3/2/2021	81.89
	4/10/2021	5.96
	4/25/2021	3.02
	5/18/2021	2.52
	6/11/2021	2.8
	6/29/201	3.34
	7/19/2021	47.4
	8/9/2021	4.13
	8/30/2021	18.3
	9/27/2021	1.76
MW-05	2/25/2021	1.57
	4/10/2021	8.36
	4/25/2021	2.42
	5/17/2021	5.2
	6/11/2021	14.22
	6/29/2021	5.33
	7/19/2021	26.9
	8/9/2021	3.69
	8/27/2021	8.7
	9/27/2021	14.92
MW-10	3/2/2021	26.07
	4/10/2021	7.31
	4/25/2021	5.21
	5/18/2021	3.73
	6/11/2021	6.65
	6/29/2021	9.49
	7/19/2021	14.5
	8/9/2021	10.08
	8/30/2021	9.3
	9/27/2021	16.3

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 500-204479-1
Client Project/Site: Joliet #29 CCR

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

Attn: DeAndre Cooley

Diana Mockler

Authorized for release by:
9/21/2021 3:23:38 PM

Diana Mockler, Project Manager I
(219)252-7570
Diana.Mockler@Eurofinset.com

Table of Contents

Case Narrative

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

Job ID: 500-204479-1

Job ID: 500-204479-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-204479-1

Comments
No additional comments.

Receipt
The samples were received on 8/27/2021 6:00 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 1.3º C, 2.5º C, 2.6º C and 3.2º C.

Receipt Exceptions
The following sample(s) was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): "Duplicate" Client did not check analysis off on COC and didn't not provide date. Logged as sample #5 and logged date per container label (8/30/21). Analysis logged per container labels (same as all previous samples).

Metals
Method 6020A: The continuing calibration verification (CCV) at line 64, associated with batch 500-617878 recovered above the upper control limit for Antimony. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

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

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

Method Summary

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

Job ID: 500-204479-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CHI
6020A	Metals (ICP/MS)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
SM 4500 SO4 E	Sulfate, Total	SM	TAL CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI
7470A	Preparation, Mercury	SW846	TAL 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:

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

Sample Summary

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

Job ID: 500-204479-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-204479-1	MW-05	Water	08/27/21 12:36	08/27/21 18:00
500-204479-2	MW-03	Water	08/30/21 10:53	08/31/21 10:57
500-204479-3	MW-04	Water	08/30/21 12:15	08/31/21 10:57
500-204479-4	MW-10	Water	08/30/21 14:30	08/31/21 10:57
500-204479-5	Duplicate	Water	08/30/21 00:00	08/31/21 10:57

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

Job ID: 500-204479-1

Client Sample ID: MW-05

Date Collected: 08/27/21 12:36
Date Received: 08/27/21 18:00

Lab Sample ID: 500-204479-1

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.015**		0.010		mg/L		09/07/21 08:35	09/08/21 19:05	1

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		09/07/21 08:35	09/08/21 19:23	1
Arsenic	**0.0014**		0.0010		mg/L		09/07/21 08:35	09/08/21 19:23	1
Barium	**0.069**		0.0025		mg/L		09/07/21 08:35	09/08/21 19:23	1
Beryllium	<0.0010		0.0010		mg/L		09/07/21 08:35	09/08/21 19:23	1
Boron	**0.36**		0.050		mg/L		09/07/21 08:35	09/08/21 19:23	1
Cadmium	<0.00050		0.00050		mg/L		09/07/21 08:35	09/08/21 19:23	1
Calcium	**100**		0.20		mg/L		09/07/21 08:35	09/08/21 19:23	1
Chromium	<0.0050		0.0050		mg/L		09/07/21 08:35	09/08/21 19:23	1
Cobalt	<0.0010		0.0010		mg/L		09/07/21 08:35	09/08/21 19:23	1
Lead	<0.00050		0.00050		mg/L		09/07/21 08:35	09/08/21 19:23	1
Molybdenum	<0.0050		0.0050		mg/L		09/07/21 08:35	09/08/21 19:23	1
Selenium	**0.0027**		0.0025		mg/L		09/07/21 08:35	09/08/21 19:23	1
Thallium	<0.0020		0.0020		mg/L		09/07/21 08:35	09/08/21 19:23	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/02/21 10:10	09/03/21 08:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**960**		10		mg/L			08/31/21 05:22	1
Chloride	**300**		40		mg/L			09/20/21 14:59	20
Fluoride	**0.30**		0.10		mg/L			09/20/21 10:33	1
Sulfate	**140**		25		mg/L			09/20/21 15:21	5

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

Job ID: 500-204479-1

Client Sample ID: MW-03

Date Collected: 08/30/21 10:53
Date Received: 08/31/21 10:57

Lab Sample ID: 500-204479-2

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.012**		0.010		mg/L		09/07/21 08:35	09/08/21 19:09	1

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		09/07/21 08:35	09/08/21 19:27	1
Arsenic	**0.0018**		0.0010		mg/L		09/07/21 08:35	09/08/21 19:27	1
Barium	**0.12**		0.0025		mg/L		09/07/21 08:35	09/08/21 19:27	1
Beryllium	<0.0010		0.0010		mg/L		09/07/21 08:35	09/08/21 19:27	1
Boron	**0.23**		0.050		mg/L		09/07/21 08:35	09/08/21 19:27	1
Cadmium	<0.00050		0.00050		mg/L		09/07/21 08:35	09/08/21 19:27	1
Calcium	**120**		0.20		mg/L		09/07/21 08:35	09/08/21 19:27	1
Chromium	<0.0050		0.0050		mg/L		09/07/21 08:35	09/08/21 19:27	1
Cobalt	**0.0014**		0.0010		mg/L		09/07/21 08:35	09/08/21 19:27	1
Lead	<0.00050		0.00050		mg/L		09/07/21 08:35	09/08/21 19:27	1
Molybdenum	<0.0050		0.0050		mg/L		09/07/21 08:35	09/08/21 19:27	1
Selenium	<0.0025		0.0025		mg/L		09/07/21 08:35	09/08/21 19:27	1
Thallium	<0.0020		0.0020		mg/L		09/07/21 08:35	09/08/21 19:27	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/02/21 10:10	09/03/21 08:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**800**		10		mg/L			09/02/21 03:16	1
Chloride	**290**		40		mg/L			09/20/21 14:59	20
Fluoride	**0.36**		0.10		mg/L			09/20/21 10:36	1
Sulfate	**140**		25		mg/L			09/20/21 15:21	5

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

Job ID: 500-204479-1

Client Sample ID: MW-04

Date Collected: 08/30/21 12:15
Date Received: 08/31/21 10:57

Lab Sample ID: 500-204479-3

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.013**		0.010		mg/L		09/07/21 08:35	09/08/21 19:13	1

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		09/07/21 08:35	09/08/21 19:30	1
Arsenic	**0.0016**		0.0010		mg/L		09/07/21 08:35	09/08/21 19:30	1
Barium	**0.12**		0.0025		mg/L		09/07/21 08:35	09/08/21 19:30	1
Beryllium	<0.0010		0.0010		mg/L		09/07/21 08:35	09/08/21 19:30	1
Boron	**0.33**		0.050		mg/L		09/07/21 08:35	09/08/21 19:30	1
Cadmium	<0.00050		0.00050		mg/L		09/07/21 08:35	09/08/21 19:30	1
Calcium	**120**		0.20		mg/L		09/07/21 08:35	09/08/21 19:30	1
Chromium	<0.0050		0.0050		mg/L		09/07/21 08:35	09/08/21 19:30	1
Cobalt	**0.0034**		0.0010		mg/L		09/07/21 08:35	09/08/21 19:30	1
Lead	<0.00050		0.00050		mg/L		09/07/21 08:35	09/08/21 19:30	1
Molybdenum	**0.0057**		0.0050		mg/L		09/07/21 08:35	09/08/21 19:30	1
Selenium	**0.0030**		0.0025		mg/L		09/07/21 08:35	09/08/21 19:30	1
Thallium	<0.0020		0.0020		mg/L		09/07/21 08:35	09/08/21 19:30	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/02/21 10:10	09/03/21 08:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1000**		10		mg/L			09/02/21 03:19	1
Chloride	**330**		40		mg/L			09/20/21 15:00	20
Fluoride	**0.40**		0.10		mg/L			09/20/21 10:39	1
Sulfate	**170**		25		mg/L			09/20/21 15:22	5

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

Job ID: 500-204479-1

Client Sample ID: MW-10

Date Collected: 08/30/21 14:30
Date Received: 08/31/21 10:57

Lab Sample ID: 500-204479-4

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.012**		0.010		mg/L		09/07/21 08:35	09/08/21 19:17	1

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		09/07/21 08:35	09/08/21 19:34	1
Arsenic	**0.0012**		0.0010		mg/L		09/07/21 08:35	09/08/21 19:34	1
Barium	**0.051**		0.0025		mg/L		09/07/21 08:35	09/08/21 19:34	1
Beryllium	<0.0010		0.0010		mg/L		09/07/21 08:35	09/08/21 19:34	1
Boron	**0.28**		0.050		mg/L		09/07/21 08:35	09/08/21 19:34	1
Cadmium	<0.00050		0.00050		mg/L		09/07/21 08:35	09/08/21 19:34	1
Calcium	**120**		0.20		mg/L		09/07/21 08:35	09/08/21 19:34	1
Chromium	<0.0050		0.0050		mg/L		09/07/21 08:35	09/08/21 19:34	1
Cobalt	<0.0010		0.0010		mg/L		09/07/21 08:35	09/08/21 19:34	1
Lead	<0.00050		0.00050		mg/L		09/07/21 08:35	09/08/21 19:34	1
Molybdenum	**0.0065**		0.0050		mg/L		09/07/21 08:35	09/08/21 19:34	1
Selenium	<0.0025		0.0025		mg/L		09/07/21 08:35	09/08/21 19:34	1
Thallium	<0.0020		0.0020		mg/L		09/07/21 08:35	09/08/21 19:34	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/02/21 10:10	09/03/21 08:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**990**		10		mg/L			09/02/21 03:22	1
Chloride	**330**		40		mg/L			09/20/21 15:00	20
Fluoride	**0.37**		0.10		mg/L			09/20/21 10:42	1
Sulfate	**170**		25		mg/L			09/20/21 15:22	5

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

Job ID: 500-204479-1

Client Sample ID: Duplicate

Date Collected: 08/30/21 00:00
Date Received: 08/31/21 10:57

Lab Sample ID: 500-204479-5

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.012**		0.010		mg/L		09/07/21 08:35	09/08/21 19:22	1

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		09/07/21 08:35	09/08/21 19:37	1
Arsenic	**0.0013**		0.0010		mg/L		09/07/21 08:35	09/08/21 19:37	1
Barium	**0.051**		0.0025		mg/L		09/07/21 08:35	09/08/21 19:37	1
Beryllium	<0.0010		0.0010		mg/L		09/07/21 08:35	09/08/21 19:37	1
Boron	**0.26**		0.050		mg/L		09/07/21 08:35	09/08/21 19:37	1
Cadmium	<0.00050		0.00050		mg/L		09/07/21 08:35	09/08/21 19:37	1
Calcium	**120**		0.20		mg/L		09/07/21 08:35	09/08/21 19:37	1
Chromium	<0.0050		0.0050		mg/L		09/07/21 08:35	09/08/21 19:37	1
Cobalt	<0.0010		0.0010		mg/L		09/07/21 08:35	09/08/21 19:37	1
Lead	<0.00050		0.00050		mg/L		09/07/21 08:35	09/08/21 19:37	1
Molybdenum	**0.0061**		0.0050		mg/L		09/07/21 08:35	09/08/21 19:37	1
Selenium	<0.0025		0.0025		mg/L		09/07/21 08:35	09/08/21 19:37	1
Thallium	<0.0020		0.0020		mg/L		09/07/21 08:35	09/08/21 19:37	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/02/21 10:10	09/03/21 08:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**870**		10		mg/L			09/02/21 03:24	1
Chloride	**330**		40		mg/L			09/20/21 15:00	20
Fluoride	**0.37**		0.10		mg/L			09/20/21 10:45	1
Sulfate	**160**		25		mg/L			09/20/21 15:22	5

Definitions/Glossary

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

Job ID: 500-204479-1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Glossary

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

Metals

Prep Batch: 617084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-204479-1	MW-05	Total/NA	Water	7470A	
500-204479-2	MW-03	Total/NA	Water	7470A	
500-204479-3	MW-04	Total/NA	Water	7470A	
500-204479-4	MW-10	Total/NA	Water	7470A	
500-204479-5	Duplicate	Total/NA	Water	7470A	
MB 500-617084/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-617084/13-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 617281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-204479-1	MW-05	Total/NA	Water	7470A	617084
500-204479-2	MW-03	Total/NA	Water	7470A	617084
500-204479-3	MW-04	Total/NA	Water	7470A	617084
500-204479-4	MW-10	Total/NA	Water	7470A	617084
500-204479-5	Duplicate	Total/NA	Water	7470A	617084
MB 500-617084/12-A	Method Blank	Total/NA	Water	7470A	617084
LCS 500-617084/13-A	Lab Control Sample	Total/NA	Water	7470A	617084

Prep Batch: 617441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-204479-1	MW-05	Total Recoverable	Water	3005A	
500-204479-2	MW-03	Total Recoverable	Water	3005A	
500-204479-3	MW-04	Total Recoverable	Water	3005A	
500-204479-4	MW-10	Total Recoverable	Water	3005A	
500-204479-5	Duplicate	Total Recoverable	Water	3005A	
MB 500-617441/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-617441/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 617834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-204479-1	MW-05	Total Recoverable	Water	6010C	617441
500-204479-2	MW-03	Total Recoverable	Water	6010C	617441
500-204479-3	MW-04	Total Recoverable	Water	6010C	617441
500-204479-4	MW-10	Total Recoverable	Water	6010C	617441
500-204479-5	Duplicate	Total Recoverable	Water	6010C	617441
MB 500-617441/1-A	Method Blank	Total Recoverable	Water	6010C	617441
LCS 500-617441/2-A	Lab Control Sample	Total Recoverable	Water	6010C	617441

Analysis Batch: 617878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-204479-1	MW-05	Total Recoverable	Water	6020A	617441
500-204479-2	MW-03	Total Recoverable	Water	6020A	617441
500-204479-3	MW-04	Total Recoverable	Water	6020A	617441
500-204479-4	MW-10	Total Recoverable	Water	6020A	617441
500-204479-5	Duplicate	Total Recoverable	Water	6020A	617441
MB 500-617441/1-A	Method Blank	Total Recoverable	Water	6020A	617441
LCS 500-617441/2-A	Lab Control Sample	Total Recoverable	Water	6020A	617441

QC Association Summary

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

Job ID: 500-204479-1

General Chemistry

Analysis Batch: 616592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-204479-1	MW-05	Total/NA	Water	SM 2540C	
MB 500-616592/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-616592/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 617000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-204479-2	MW-03	Total/NA	Water	SM 2540C	
500-204479-3	MW-04	Total/NA	Water	SM 2540C	
500-204479-4	MW-10	Total/NA	Water	SM 2540C	
500-204479-5	Duplicate	Total/NA	Water	SM 2540C	
MB 500-617000/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-617000/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 619345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-204479-1	MW-05	Total/NA	Water	SM 4500 F C	
500-204479-2	MW-03	Total/NA	Water	SM 4500 F C	
500-204479-3	MW-04	Total/NA	Water	SM 4500 F C	
500-204479-4	MW-10	Total/NA	Water	SM 4500 F C	
500-204479-5	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-619345/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-619345/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 619403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-204479-1	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-204479-2	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-204479-3	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-204479-4	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-204479-5	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-619403/15	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-619403/16	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 619404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-204479-1	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-204479-2	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-204479-3	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-204479-4	MW-10	Total/NA	Water	SM 4500 Cl- E	
500-204479-5	Duplicate	Total/NA	Water	SM 4500 Cl- E	
MB 500-619404/16	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-619404/17	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-617441/1-A
Matrix: Water
Analysis Batch: 617834

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 617441

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		09/07/21 08:35	09/08/21 17:56	1

Lab Sample ID: LCS 500-617441/2-A
Matrix: Water
Analysis Batch: 617834

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 617441

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.750	0.754		mg/L		101	80 - 120

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-617441/1-A
Matrix: Water
Analysis Batch: 617878

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 617441

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		09/07/21 08:35	09/08/21 17:55	1
Arsenic	<0.0010		0.0010		mg/L		09/07/21 08:35	09/08/21 17:55	1
Barium	<0.0025		0.0025		mg/L		09/07/21 08:35	09/08/21 17:55	1
Beryllium	<0.0010		0.0010		mg/L		09/07/21 08:35	09/08/21 17:55	1
Boron	<0.050		0.050		mg/L		09/07/21 08:35	09/08/21 17:55	1
Cadmium	<0.00050		0.00050		mg/L		09/07/21 08:35	09/08/21 17:55	1
Calcium	<0.20		0.20		mg/L		09/07/21 08:35	09/08/21 17:55	1
Chromium	<0.0050		0.0050		mg/L		09/07/21 08:35	09/08/21 17:55	1
Cobalt	<0.0010		0.0010		mg/L		09/07/21 08:35	09/08/21 17:55	1
Lead	<0.00050		0.00050		mg/L		09/07/21 08:35	09/08/21 17:55	1
Molybdenum	<0.0050		0.0050		mg/L		09/07/21 08:35	09/08/21 17:55	1
Selenium	<0.0025		0.0025		mg/L		09/07/21 08:35	09/08/21 17:55	1
Thallium	<0.0020		0.0020		mg/L		09/07/21 08:35	09/08/21 17:55	1

Lab Sample ID: LCS 500-617441/2-A
Matrix: Water
Analysis Batch: 617878

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 617441

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.750	0.780		mg/L		104	80 - 120
Arsenic	0.150	0.144		mg/L		96	80 - 120
Barium	3.00	2.97		mg/L		99	80 - 120
Beryllium	0.0750	0.0744		mg/L		99	80 - 120
Boron	1.50	1.40		mg/L		93	80 - 120
Cadmium	0.0750	0.0734		mg/L		98	80 - 120
Calcium	15.0	15.0		mg/L		100	80 - 120
Chromium	0.300	0.294		mg/L		98	80 - 120
Cobalt	0.750	0.745		mg/L		99	80 - 120
Lead	0.150	0.161		mg/L		108	80 - 120
Molybdenum	1.50	1.45		mg/L		97	80 - 120
Selenium	0.150	0.146		mg/L		97	80 - 120
Thallium	0.150	0.158		mg/L		105	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-617084/12-A
Matrix: Water
Analysis Batch: 617281

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 617084

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/02/21 10:10	09/03/21 08:37	1

Lab Sample ID: LCS 500-617084/13-A
Matrix: Water
Analysis Batch: 617281

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 617084

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00211		mg/L		106	80 - 120

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

Lab Sample ID: MB 500-616592/1
Matrix: Water
Analysis Batch: 616592

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			08/31/21 04:33	1

Lab Sample ID: LCS 500-616592/2
Matrix: Water
Analysis Batch: 616592

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	278		mg/L		111	80 - 120

Lab Sample ID: MB 500-617000/1
Matrix: Water
Analysis Batch: 617000

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			09/02/21 02:51	1

Lab Sample ID: LCS 500-617000/2
Matrix: Water
Analysis Batch: 617000

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	246		mg/L		98	80 - 120

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-619404/16
Matrix: Water
Analysis Batch: 619404

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			09/20/21 14:36	1

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

Lab Sample ID: LCS 500-619404/17
Matrix: Water
Analysis Batch: 619404

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			20.0	19.9		mg/L		99	85 - 115		

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-619345/3
Matrix: Water
Analysis Batch: 619345

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			09/20/21 09:40	1

Lab Sample ID: LCS 500-619345/4
Matrix: Water
Analysis Batch: 619345

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	10.6		mg/L		106	90 - 119		

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-619403/15
Matrix: Water
Analysis Batch: 619403

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			09/20/21 13:41	1

Lab Sample ID: LCS 500-619403/16
Matrix: Water
Analysis Batch: 619403

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	20.5		mg/L		102	88 - 123		

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Mark Wilson	Lab PM: Mockler Diana J	Carrier Tracking No(s):	COC No: 500-94078-41749 1
Client Contact: Erin Bulson	Phone: 630-325-1300	E-Mail: Diana Mockler@Eurofinset com	State of Origin:	Page: Page 1 of 1
Company: KPRG and Associates, Inc.	PWSID:			Job #: 500-204479

Address: 14665 West Lisbon Road Suite 1A	Due Date Requested	Analysis Requested	Preservation Codes.
City: Brookfield	TAT Requested (days)		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) Other:
State Zip: WI 53005	Compliance Project: Δ Yes Δ No		
Phone:	PO #: 4502042860		
Email: erinb@kprginc.com	WO #:		
Project Name: Joliet #29 CCR/ Event Desc. Quarterly MWG Joliet #29 CCR	Project #: 50011568		
Site: Illinois	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010C, 6020A, 7470A	2540C, 4500_F_C, SM4500_Cl_E, SM4500_SO4_E	903.0, 904.0	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D		
MW-03				Water							
MW-04				Water							
MW-05	8-27-21	0736	G	Water	Y		X	X	X		
MW-10	~~8-27-21~~		G	Water	Y		X	X	X		
Duplicate				Water							

500-204479 COC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ 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: 8/27/21 1800	Company: KPRG	Received by:	Date/Time: 8/27/21 1800	Company: ECHCHI
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 2.6

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park IL 60484
Phone (708) 534-5200 Phone (708) 534-5211

Chain of Custody Record

eurofins

500-204479 COC

Client Information	Sampler: Mark Wilson	Lab PM: Mockler Diana J	king No(s)	COC No. 500-91207-40679 1
Client Contact: Erin Bulson	Phone: (630) 325-1300	E-Mail: Diana.Mockler@Eurofinset.com	State of Origin:	Page: Page 1 of 1
Company: KPRG and Associates Inc.	PWSID:			Job #: 500-204479
Address: 14665 West Lisbon Road Suite 1A	Due Date Requested:			
City: Brookfield	TAT Requested (days):			
State, Zip: WI, 53005	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 4502042860			
Email: erinb@kprginc.com	WO #:			
Project Name: Quarterly MWG Joliet #29 CCR	Project #: 50011568			
Site: Illinois	SSOW#:			

Analysis Requested

Preservation Codes

A HCL	M - Hexane
B NaOH	N None
C Zn Acetate	O AsNaO2
D Nitric Acid	P Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R Na2S2O3
G Amchlor	S H2SO4
H - Ascorbic Acid	T TSP Dodecahydrate
I - Ice	U - Acetone
J DI Water	V MCAA
K EDTA	W - pH 4-5
L EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010C - Lithium, 6020A - 113 elements, 7470A - Mercury	2540C - TDS	4500FC - Fluoride	SM600CLE - Chloride	SM4500SO4 - Sulfate	903- Rad 226	904 - Rad 228	Rad Combined	Total Number of containers	Special Instructions/Note
				Preservation Code:				D	N	D							
2	MW-03	8-30-21	1053	G	Water	Y		X	X	X	X	X	X	X	X		*Metals List: Sb,As,Ba,Be,B,Cd,Ca,Cr,Co,Pb,Mo,SeTl
3	MW-04	8-30-21	1215	G	Water	Y		X	X	X	X	X	X	X	X		
	MW-05				Water												
4	MW-10	8-30-21	1430	G	Water	Y		X	X	X	X	X	X	X	X		
5	Duplicate				Water												

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ 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	Company	Received by	Date/Time	Company
1	Mark Wilson/jas/N.Nel	8-31-21/0930	KPRG	N. Nel	8/31/21 0930	ETA
2	N.Nel	8/31/21 1057	ETA	Stephanie Hernandez	8/31/21 1057	ETA-CHI
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks. 13, 3 2, 2 5

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-204479-1

Login Number: 204479

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Hernandez, Stephanie

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	2.6,1.3,3.2,2.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Chronicle

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

Job ID: 500-204479-1

Client Sample ID: MW-05

Date Collected: 08/27/21 12:36
Date Received: 08/27/21 18:00

Lab Sample ID: 500-204479-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			617441	09/07/21 08:35	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	617834	09/08/21 19:05	JJB	TAL CHI
Total Recoverable	Prep	3005A			617441	09/07/21 08:35	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	617878	09/08/21 19:23	FXG	TAL CHI
Total/NA	Prep	7470A			617084	09/02/21 10:10	MJG	TAL CHI
Total/NA	Analysis	7470A		1	617281	09/03/21 08:41	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	616592	08/31/21 05:22	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		20	619404	09/20/21 14:59	MS	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	619345	09/20/21 10:33	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	619403	09/20/21 15:21	MS	TAL CHI

Client Sample ID: MW-03

Date Collected: 08/30/21 10:53
Date Received: 08/31/21 10:57

Lab Sample ID: 500-204479-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			617441	09/07/21 08:35	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	617834	09/08/21 19:09	JJB	TAL CHI
Total Recoverable	Prep	3005A			617441	09/07/21 08:35	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	617878	09/08/21 19:27	FXG	TAL CHI
Total/NA	Prep	7470A			617084	09/02/21 10:10	MJG	TAL CHI
Total/NA	Analysis	7470A		1	617281	09/03/21 08:44	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	617000	09/02/21 03:16	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		20	619404	09/20/21 14:59	MS	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	619345	09/20/21 10:36	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	619403	09/20/21 15:21	MS	TAL CHI

Client Sample ID: MW-04

Date Collected: 08/30/21 12:15
Date Received: 08/31/21 10:57

Lab Sample ID: 500-204479-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			617441	09/07/21 08:35	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	617834	09/08/21 19:13	JJB	TAL CHI
Total Recoverable	Prep	3005A			617441	09/07/21 08:35	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	617878	09/08/21 19:30	FXG	TAL CHI
Total/NA	Prep	7470A			617084	09/02/21 10:10	MJG	TAL CHI
Total/NA	Analysis	7470A		1	617281	09/03/21 08:46	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	617000	09/02/21 03:19	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		20	619404	09/20/21 15:00	MS	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	619345	09/20/21 10:39	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	619403	09/20/21 15:22	MS	TAL CHI

Lab Chronicle

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

Job ID: 500-204479-1

Client Sample ID: MW-10

Lab Sample ID: 500-204479-4

Date Collected: 08/30/21 14:30

Matrix: Water

Date Received: 08/31/21 10:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			617441	09/07/21 08:35	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	617834	09/08/21 19:17	JJB	TAL CHI
Total Recoverable	Prep	3005A			617441	09/07/21 08:35	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	617878	09/08/21 19:34	FXG	TAL CHI
Total/NA	Prep	7470A			617084	09/02/21 10:10	MJG	TAL CHI
Total/NA	Analysis	7470A		1	617281	09/03/21 08:48	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	617000	09/02/21 03:22	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		20	619404	09/20/21 15:00	MS	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	619345	09/20/21 10:42	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	619403	09/20/21 15:22	MS	TAL CHI

Client Sample ID: Duplicate

Lab Sample ID: 500-204479-5

Date Collected: 08/30/21 00:00

Matrix: Water

Date Received: 08/31/21 10:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			617441	09/07/21 08:35	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	617834	09/08/21 19:22	JJB	TAL CHI
Total Recoverable	Prep	3005A			617441	09/07/21 08:35	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	617878	09/08/21 19:37	FXG	TAL CHI
Total/NA	Prep	7470A			617084	09/02/21 10:10	MJG	TAL CHI
Total/NA	Analysis	7470A		1	617281	09/03/21 08:50	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	617000	09/02/21 03:24	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		20	619404	09/20/21 15:00	MS	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	619345	09/20/21 10:45	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	619403	09/20/21 15:22	MS	TAL CHI

Laboratory References:

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

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 500-204479-2
Client Project/Site: Joliet #29 CCR

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

Attn: DeAndre Cooley

Diana Mockler

Authorized for release by:
10/21/2021 2:46:38 PM

Diana Mockler, Project Manager I
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Table of Contents

Job ID: 500-204479-2

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-204479-2

Comments
No additional comments.

Receipt
The samples were received on 8/27/2021 6:00 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 1.3º C, 2.5º C, 2.6º C and 3.2º C.

Receipt Exceptions
The following sample(s) was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): "Duplicate" Client did not check analysis off on COC and didn't not provide date. Logged as sample #5 and logged date per container label (8/30/21). Analysis logged per container labels (same as all previous samples).

RAD
Method 903.0: Radium-226 prep batch 160-526228:

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-04 (500-204479-3) and MW-10 (500-204479-4)

Methods 903.0, 9315: Radium 226 prep batch 160-526228
Duplicate precision (RPD/RER/DER) is outside the established QC criteria for (500-204479-D-2-A DU), associated with radium-226 batch 160-526228. However, both the sample and duplicate results are below the requested limit (RL); therefore, the data does not appear to be adversely affected. Results are reported as achieved.

Methods 903.0, 9315: Radium-226 prep batch 160-526228:

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-05 (500-204479-1), MW-03 (500-204479-2), MW-04 (500-204479-3), MW-10 (500-204479-4), Duplicate (500-204479-5) and (500-204479-D-2-A DU)

Methods 904.0, 9320: Radium-228 prep batch 160-526247:

The method blank was counted on a detector that failed the daily background check high. The detector passed the background check the day prior to and after the sample count. The method blank activity is below the MDC and RL. The lab does not believe this excursion adversely affects the data. The data have been reported with this narrative. (MB 160-526247/1-A)

Methods 904.0, 9320: Radium-228 prep batch 160-526247:

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-05 (500-204479-1), MW-03 (500-204479-2), MW-04 (500-204479-3), MW-10 (500-204479-4), Duplicate (500-204479-5), (LCS 160-526247/2-A), (MB 160-526247/1-A) and (500-204479-D-2-B DU)

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

Method Summary

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

Job ID: 500-204479-2

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

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

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

Sample Summary

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

Job ID: 500-204479-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-204479-1	MW-05	Water	08/27/21 12:36	08/27/21 18:00
500-204479-2	MW-03	Water	08/30/21 10:53	08/31/21 10:57
500-204479-3	MW-04	Water	08/30/21 12:15	08/31/21 10:57
500-204479-4	MW-10	Water	08/30/21 14:30	08/31/21 10:57
500-204479-5	Duplicate	Water	08/30/21 00:00	08/31/21 10:57

Client Sample Results

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

Job ID: 500-204479-2

Client Sample ID: MW-05

Date Collected: 08/27/21 12:36
Date Received: 08/27/21 18:00

Lab Sample ID: 500-204479-1

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	0.136	U	0.105	0.106	1.00	0.155	pCi/L	09/09/21 17:37	10/11/21 21:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*40 - 110*	*09/09/21 17:37*	*10/11/21 21:24*	*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	**0.393**		0.253	0.256	1.00	0.389	pCi/L	09/10/21 09:05	10/07/21 12:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*40 - 110*	*09/10/21 09:05*	*10/07/21 12:45*	*1*
Y Carrier	*85.6*		*40 - 110*	*09/10/21 09:05*	*10/07/21 12:45*	*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	**0.528**		0.274	0.277	5.00	0.389	pCi/L		10/12/21 18:39	1

Client Sample Results

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

Job ID: 500-204479-2

Client Sample ID: MW-03
Date Collected: 08/30/21 10:53
Date Received: 08/31/21 10:57

Lab Sample ID: 500-204479-2
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	0.109	U	0.109	0.110	1.00	0.174	pCi/L	09/09/21 17:37	10/12/21 17:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.0*		*40 - 110*	*09/09/21 17:37*	*10/12/21 17:52*	*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	**0.532**		0.280	0.284	1.00	0.417	pCi/L	09/10/21 09:05	10/07/21 12:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.0*		*40 - 110*	*09/10/21 09:05*	*10/07/21 12:46*	*1*
Y Carrier	*83.4*		*40 - 110*	*09/10/21 09:05*	*10/07/21 12:46*	*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	**0.641**		0.300	0.305	5.00	0.417	pCi/L		10/12/21 18:39	1

Client Sample ID: MW-04
Date Collected: 08/30/21 12:15
Date Received: 08/31/21 10:57

Lab Sample ID: 500-204479-3
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.542**		0.312	0.316	1.00	0.426	pCi/L	09/09/21 17:37	10/07/21 21:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.1*		*40 - 110*	*09/09/21 17:37*	*10/07/21 21:59*	*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	0.335	U	0.296	0.297	1.00	0.476	pCi/L	09/10/21 09:05	10/07/21 12:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.1*		*40 - 110*	*09/10/21 09:05*	*10/07/21 12:34*	*1*
Y Carrier	*84.5*		*40 - 110*	*09/10/21 09:05*	*10/07/21 12:34*	*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	**0.877**		0.430	0.434	5.00	0.476	pCi/L		10/12/21 18:39	1

Client Sample Results

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

Job ID: 500-204479-2

Client Sample ID: MW-10

Date Collected: 08/30/21 14:30
Date Received: 08/31/21 10:57

Lab Sample ID: 500-204479-4

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	**0.381**		0.228	0.230	1.00	0.300	pCi/L	09/09/21 17:37	10/07/21 21:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.4*		*40 - 110*	*09/09/21 17:37*	*10/07/21 21:59*	*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	0.129	U	0.217	0.217	1.00	0.367	pCi/L	09/10/21 09:05	10/07/21 12:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.4*		*40 - 110*	*09/10/21 09:05*	*10/07/21 12:34*	*1*
Y Carrier	*84.5*		*40 - 110*	*09/10/21 09:05*	*10/07/21 12:34*	*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	**0.510**		0.315	0.316	5.00	0.367	pCi/L		10/12/21 18:39	1

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

Job ID: 500-204479-2

Client Sample ID: Duplicate

Date Collected: 08/30/21 00:00
Date Received: 08/31/21 10:57

Lab Sample ID: 500-204479-5

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	0.292	U	0.285	0.286	1.00	0.452	pCi/L	09/09/21 17:37	10/07/21 22:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.7*		*40 - 110*	*09/09/21 17:37*	*10/07/21 22:00*	*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	0.186	U	0.261	0.261	1.00	0.435	pCi/L	09/10/21 09:05	10/07/21 12:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.7*		*40 - 110*	*09/10/21 09:05*	*10/07/21 12:34*	*1*
Y Carrier	*84.1*		*40 - 110*	*09/10/21 09:05*	*10/07/21 12:34*	*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	**0.478**		0.386	0.387	5.00	0.452	pCi/L		10/12/21 18:39	1

Definitions/Glossary

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

Job ID: 500-204479-2

Qualifiers

Rad

Qualifier	Qualifier Description
F	Duplicate RPD exceeds the control limit
U	Result is less than the sample detection limit.

Glossary

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

QC Association Summary

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

Job ID: 500-204479-2

Rad

Prep Batch: 526228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-204479-1	MW-05	Total/NA	Water	PrecSep-21	
500-204479-2	MW-03	Total/NA	Water	PrecSep-21	
500-204479-3	MW-04	Total/NA	Water	PrecSep-21	
500-204479-4	MW-10	Total/NA	Water	PrecSep-21	
500-204479-5	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-526228/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-526228/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-204479-2 DU	MW-03	Total/NA	Water	PrecSep-21	

Prep Batch: 526247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-204479-1	MW-05	Total/NA	Water	PrecSep_0	
500-204479-2	MW-03	Total/NA	Water	PrecSep_0	
500-204479-3	MW-04	Total/NA	Water	PrecSep_0	
500-204479-4	MW-10	Total/NA	Water	PrecSep_0	
500-204479-5	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-526247/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-526247/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-204479-2 DU	MW-03	Total/NA	Water	PrecSep_0	

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-526228/1-A
Matrix: Water
Analysis Batch: 530631

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 526228

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.09496	U	0.121	0.121	1.00	0.200	pCi/L	09/09/21 17:37	10/11/21 21:21	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*68.3*		*40 - 110*	*09/09/21 17:37*	*10/11/21 21:21*	*1*

Lab Sample ID: LCS 160-526228/2-A
Matrix: Water
Analysis Batch: 530631

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 526228

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.94		1.22	1.00	0.224	pCi/L	96	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*72.9*		*40 - 110*

Lab Sample ID: 500-204479-2 DU
Matrix: Water
Analysis Batch: 531123

Client Sample ID: MW-03
Prep Type: Total/NA
Prep Batch: 526228

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.109	U		0.6035	F	0.217	1.00	0.238	pCi/L			1.51	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*62.1*		*40 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-526247/1-A
Matrix: Water
Analysis Batch: 530525

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 526247

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.05123	U	0.328	0.328	1.00	0.576	pCi/L	09/10/21 09:05	10/07/21 12:29	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*68.3*		*40 - 110*	*09/10/21 09:05*	*10/07/21 12:29*	*1*
Y Carrier	*83.0*		*40 - 110*	*09/10/21 09:05*	*10/07/21 12:29*	*1*

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

Lab Sample ID: LCS 160-526247/2-A
Matrix: Water
Analysis Batch: 530525

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 526247

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.26	10.88		1.30	1.00	0.480	pCi/L	117	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*72.9*		*40 - 110*
Y Carrier	*82.2*		*40 - 110*

Lab Sample ID: 500-204479-2 DU
Matrix: Water
Analysis Batch: 530487

Client Sample ID: MW-03
Prep Type: Total/NA
Prep Batch: 526247

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.532			0.01577	U	0.343	1.00	0.610	pCi/L			0.82	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*62.1*		*40 - 110*
Y Carrier	*83.7*		*40 - 110*

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Mark Wilson	Lab PM: Mockler Diana J	Carrier Tracking No(s):	COC No: 500-94078-41749 1
Client Contact: Erin Bulson	Phone: 630-325-1300	E-Mail: Diana Mockler@Eurofinset com	State of Origin:	Page: Page 1 of 1
Company: KPRG and Associates, Inc.	PWSID:			Job #: 500-204479

Address: 14665 West Lisbon Road Suite 1A	Due Date Requested	Analysis Requested	Preservation Codes.
City: Brookfield	TAT Requested (days)		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)
State Zip: WI 53005	Compliance Project: Δ Yes Δ No		
Phone:	PO #: 4502042860		Other:
Email: erinb@kprginc.com	WO #:		
Project Name: Joliet #29 CCR/ Event Desc. Quarterly MWG Joliet #29 CCR	Project #: 50011568		
Site: Illinois	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010C, 6020A, 7470A	2540C, 4500_F_C, SM4500_Cl_E, SM4500_SO4_E	903.0, 904.0	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D		
MW-03				Water							
MW-04				Water							
MW-05	8-27-21	0736	G	Water	N		X	X	X		
MW-10	~~8-27-21~~		G	Water	N		X	X	X		
Duplicate				Water							

500-204479 COC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ 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: Mark Wilson	Date/Time: 8-27-21 1800	Company: KPRG	Received by: Paula Buckley	Date/Time: 8/27/21 1800	Company: EUTA CHI
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 2.6

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park IL 60484
Phone (708) 534-5200 Phone (708) 534-5211

Chain of Custody Record

eurofins

500-204479 COC

Client Information	Sampler: Mark Wilson	Lab PM: Mockler Diana J	king No(s)	COC No. 500-91207-40679 1
Client Contact: Erin Bulson	Phone: (630) 325-1300	E-Mail: Diana.Mockler@Eurofinset.com	State of Origin:	Page: Page 1 of 1
Company: KPRG and Associates Inc.	PWSID:			Job #: 500-204479
Address: 14665 West Lisbon Road Suite 1A	Due Date Requested:			
City: Brookfield	TAT Requested (days):			
State, Zip: WI, 53005	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 4502042860			
Email: erinb@kprginc.com	WO #:			
Project Name: Quarterly MWG Joliet #29 CCR	Project #: 50011568			
Site: Illinois	SSOW#:			

Analysis Requested

Preservation Codes

A HCL	M - Hexane
B NaOH	N None
C Zn Acetate	O AsNaO2
D Nitric Acid	P Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R Na2S2O3
G Amchlor	S H2SO4
H - Ascorbic Acid	T TSP Dodecahydrate
I - Ice	U - Acetone
J DI Water	V MCAA
K EDTA	W - pH 4-5
L EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010C - Lithium, 6020A - 113 elements, 7470A - Mercury	2540C - TDS	4500FC - Fluoride	SM600CLE - Chloride	SM4500SO4 - Sulfate	903- Rad 226	904 - Rad 228	Rad Combined							Total Number of containers	Special Instructions/Note
				Preservation Code:		X	X	D	N	D												X	
2	MW-03	8-30-21	1053	G	Water	Y		X	X	X	X	X	X	X	X								*Metals List: Sb,As,Ba,Be,B,Cd,Ca,Cr,Co,Pb,Mo,SeTl
3	MW-04	8-30-21	1215	G	Water	Y		X	X	X	X	X	X	X	X								
	MW-05				Water																		
4	MW-10	8-30-21	1430	G	Water	Y		X	X	X	X	X	X	X	X								
5	Duplicate				Water																		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ 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	Company	Received by	Date/Time	Company
1	Mark Wilson/KPRG	8-31-21/0930	KPRG	[illegible]	8/31/21 0930	ETA
2	[illegible]	8/31/21 1057	ETA	Stephanie Hernandez	8/31/21 1057	ETA-CHI
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks: 13, 3 2, 2 5

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-152006.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Diana.Mockler@Eurofinset.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-204479-2
Address: 13715 Rider Trail North,	Due Date Requested: 9/30/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #29 CCR	Project #: 50011568			
Site: NRG Midwest Generation LSQ Joliet#29 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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, 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, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-05 (500-204479-1)	8/27/21	12:36 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & 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/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmenca laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

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

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: [signature]	Date/Time: 8/30/21 1130	Company: ETA CHL	Received by: FED EX
Relinquished by: FED EX	Date/Time:	Company	Received by: [signature] Date/Time: 8/31/21 1005 Company: ETA STL
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-152054.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Diana.Mockler@Eurofinset.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-204479-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/21/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Joliet #29 CCR	Project #: 50011568			
Site: NRG Midwest Generation LSQ Joliet#29 CCR	SSOW#:			

Analysis Requested

Preservation Codes:

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, 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, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-03 (500-204479-2)	8/30/21	10:53 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
MW-04 (500-204479-3)	8/30/21	12:15 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
MW-10 (500-204479-4)	8/30/21	14:30 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
Duplicate (500-204479-5)	8/30/21	Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & 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/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

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

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: [signature]	Date/Time: 8/31/21 1445	Company: EHACH	Received by: [signature] Date/Time: 9/1/21 08:37 Company: TA SR
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-204479-2

Login Number: 204479

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Hernandez, Stephanie

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	2.6,1.3,3.2,2.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	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: 500-204479-2

Login Number: 204479
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/31/21 12:02 PM

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

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-204479-2

Login Number: 204479
List Number: 3
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 09/01/21 05:44 PM

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

Lab Chronicle

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

Job ID: 500-204479-2

Client Sample ID: MW-05
Date Collected: 08/27/21 12:36
Date Received: 08/27/21 18:00

Lab Sample ID: 500-204479-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			526228	09/09/21 17:37	MLK	TAL SL
Total/NA	Analysis	903.0		1	530630	10/11/21 21:24	EMH	TAL SL
Total/NA	Prep	PrecSep_0			526247	09/10/21 09:05	MJ	TAL SL
Total/NA	Analysis	904.0		1	530479	10/07/21 12:45	ANW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	531331	10/12/21 18:39	EMH	TAL SL

Client Sample ID: MW-03
Date Collected: 08/30/21 10:53
Date Received: 08/31/21 10:57

Lab Sample ID: 500-204479-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			526228	09/09/21 17:37	MLK	TAL SL
Total/NA	Analysis	903.0		1	531123	10/12/21 17:52	FLC	TAL SL
Total/NA	Prep	PrecSep_0			526247	09/10/21 09:05	MJ	TAL SL
Total/NA	Analysis	904.0		1	530479	10/07/21 12:46	ANW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	531331	10/12/21 18:39	EMH	TAL SL

Client Sample ID: MW-04
Date Collected: 08/30/21 12:15
Date Received: 08/31/21 10:57

Lab Sample ID: 500-204479-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			526228	09/09/21 17:37	MLK	TAL SL
Total/NA	Analysis	903.0		1	530476	10/07/21 21:59	ANW	TAL SL
Total/NA	Prep	PrecSep_0			526247	09/10/21 09:05	MJ	TAL SL
Total/NA	Analysis	904.0		1	530476	10/07/21 12:34	ANW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	531331	10/12/21 18:39	EMH	TAL SL

Client Sample ID: MW-10
Date Collected: 08/30/21 14:30
Date Received: 08/31/21 10:57

Lab Sample ID: 500-204479-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			526228	09/09/21 17:37	MLK	TAL SL
Total/NA	Analysis	903.0		1	530476	10/07/21 21:59	ANW	TAL SL
Total/NA	Prep	PrecSep_0			526247	09/10/21 09:05	MJ	TAL SL
Total/NA	Analysis	904.0		1	530476	10/07/21 12:34	ANW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	531331	10/12/21 18:39	EMH	TAL SL

Lab Chronicle

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

Job ID: 500-204479-2

Client Sample ID: Duplicate

Date Collected: 08/30/21 00:00
Date Received: 08/31/21 10:57

Lab Sample ID: 500-204479-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			526228	09/09/21 17:37	MLK	TAL SL
Total/NA	Analysis	903.0		1	530476	10/07/21 22:00	ANW	TAL SL
Total/NA	Prep	PrecSep_0			526247	09/10/21 09:05	MJ	TAL SL
Total/NA	Analysis	904.0		1	530476	10/07/21 12:34	ANW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	531331	10/12/21 18:39	EMH	TAL SL

Laboratory References:

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

Tracer/Carrier Summary

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

Job ID: 500-204479-2

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)
500-204479-1	MW-05	93.6
500-204479-2	MW-03	89.0
500-204479-2 DU	MW-03	62.1
500-204479-3	MW-04	82.1
500-204479-4	MW-10	95.4
500-204479-5	Duplicate	87.7
LCS 160-526228/2-A	Lab Control Sample	72.9
MB 160-526228/1-A	Method Blank	68.3

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)
500-204479-1	MW-05	93.6	85.6
500-204479-2	MW-03	89.0	83.4
500-204479-2 DU	MW-03	62.1	83.7
500-204479-3	MW-04	82.1	84.5
500-204479-4	MW-10	95.4	84.5
500-204479-5	Duplicate	87.7	84.1
LCS 160-526247/2-A	Lab Control Sample	72.9	82.2
MB 160-526247/1-A	Method Blank	68.3	83.0

Tracer/Carrier Legend

Ba = Ba Carrier
Y = Y Carrier