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 4th quarter 2023 which includes the entire list of parameters specified under Section 845.600(a)(1) and (b). Table 1 is a summary table of all available CCR monitoring data to date including any data generated previously as part of the Federal CCR Rule monitoring. In addition, Table 2 provides a summary of turbidity data which was collected as part of State CCR Rule requirements which is a data parameter that was not required under the Federal CCR Rule.

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

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

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228	Selenium	Thallium
MW-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	< 0.0005	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	< 0.0005	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	< 0.0005	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	< 0.0005	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	0.0014	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	0.00086	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	0.0012	< 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	< 0.0005	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	< 0.0005	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	0.00059	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
	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
	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
	5/7/2019	0.56	130	410	0.39	7.17	95	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	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
	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
	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
	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
	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	< 0.0005	0.011	< 0.0002	0.0057	NA	< 0.0025	< 0.002
	5/18/2021	0.33	140	350	0.39	7.16	210	1200	< 0.003	0.0014	0.06	< 0.001	< 0.0005	< 0.005	< 0.001	< 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	1300	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	< 0.0005	0.012	< 0.0002	0.0065	0.51	< 0.0025	< 0.002
	11/16/2021	0.39	120	260	0.38	7.01	150	1000	< 0.003	0.0012	0.049	^1+ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.011	< 0.0002	0.0066	0.692	< 0.0025	< 0.002
	3/3/2022	0.47	120	280	0.41	7.05	190	1000	< 0.003	0.0014	0.055	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.013	< 0.0002	0.0066	< 0.4	< 0.0025	< 0.002
	5/26/2022	0.39	120	280	0.41	6.90	160	1000	< 0.003	0.0013	0.046	^+ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0064	< 0.593	< 0.0025	< 0.002
	8/31/2022	0.33	110	240	0.41	6.58	160	970	< 0.003	0.0012	0.042	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0057	0.534	< 0.0025	< 0.002
	11/9/2022	0.32	110	240	0.57	7.00	150	880	< 0.003	0.0014	0.043	< 0.001	< 0.0005	< 0.005	< 0.001	^+ < 0.0005	0.01	< 0.0002	0.0055	0.728	< 0.0025	< 0.002
	12/20/2022 (R)	NS	NS	NS	0.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/28/2023	0.36	130	330	0.38	7.06	170	1200	< 0.003	0.0012	0.053	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.013	< 0.0002	0.0058	< 0.787	< 0.0025	< 0.002
	5/3/2023	0.37	130	310	0.39	6.99	190	1100	< 0.0030	< 0.0010	0.053	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.014	< 0.00020	0.0068	< 0.487	< 0.0025	< 0.0020
	7/20/2023	0.33	110	250	0.39	6.95	160	960	< 0.0030	< 0.0010	0.048	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.011	< 0.00020	0.0053	0.623	< 0.0025	< 0.0020
	10/26/2023	0.40	120	300	0.41	6.96	160	1100	< 0.0030	0.0011	0.050	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.011	< 0.00020	0.0064	0.739	< 0.0025	< 0.0020
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	< 0.0005	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	< 0.0005	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	< 0.0005	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	< 0.0005	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	< 0.0005	< 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	< 0.0005	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	< 0.0005	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	< 0.0005	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	< 0.0005	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	< 0.0005	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
	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
	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
	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
	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
	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
	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
	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
	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	< 0.0005	0.01	< 0.0002	< 0.005	NA	< 0.0025	< 0.002
	5/18/2021	0.28	130	290	0.4	7.13	190	1200	< 0.003	0.0016	0.14	< 0.001	< 0.0005	< 0.005	0.0011	< 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	1300	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	< 0.0005	0.012	< 0.0002	< 0.005	0.641	< 0.0025	< 0.002
	11/16/2021	0.3	130	280	0.37	7.11	150	1000	< 0.003	0.0018	0.14	^1+ < 0.001	< 0.0005	< 0.005	0.0018	< 0.0005	0.011	< 0.0002	< 0.005	1.15	< 0.0025	< 0.002
	3/3/2022	0.3	130	270	0.4	7.05	180	1300	< 0.003	0.0019	0.14	< 0.001	< 0.0005	< 0.005	0.0014	< 0.0005	0.012	< 0.0002	< 0.005	< 0.672	< 0.0025	< 0.002
	5/26/2022	0.39	120	280	0.41	6.98	160	1100	< 0.003	0.002	0.13	^+ < 0.001	< 0.0005	< 0.005	0.0011	< 0.0005	< 0.01	< 0.0002	< 0.005	0.557	0.0042	< 0.002
	8/31/2022	0.23	110	270	0.39	6.25	130	1200	< 0.003	0.0018	0.11	< 0.001	< 0.0005	< 0.005	0.0011	< 0.0005	0.011	< 0.0002	< 0.005	0.525	< 0.0025	< 0.002
	11/9/2022	0.25	120	300	0.54	7.03	140	1100	< 0.003	0.002	0.12	< 0.001	< 0.0005	< 0.005	0.0015	^+ < 0.0005	0.012	< 0.0002	< 0.005	< 0.536	< 0.0025	< 0.002
	2/28/2023	0.3	120	280	0.37	7.06	160	1000	< 0.003	0.0014	0.12	< 0.001	< 0.0005	< 0.005	0.0015	< 0.0005	0.011	< 0.0002	< 0.005	< 0.52	0.0033	< 0.002
	5/3/2023	0.36	130	250	0.37	6.97	200	980	< 0.0030	0.0014	0.12	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.012	< 0.00020	< 0.0050	< 0.453	0.0028	< 0.0020
	7/20/2023	0.32	130	250	0.36	6.86	190	1000	< 0.0030	0.0013	0.12	< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.00072	0.010	< 0.00020	< 0.0050	< 0.523	< 0.0025	< 0.0020
	10/26/2023	0.31	130	300	0.40	6.93	170	1100	< 0.0030	0.0017	0.13	< 0.0010	< 0.00050	< 0.0050	0.0014	< 0.00050	0.010	< 0.00020	< 0.0050	0.908	0.0028	< 0.0020
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	< 0.0005	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	0.00062	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	< 0.0005	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	< 0.0005	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	0.0012	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	< 0.0005	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	0.00055	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	< 0.0005	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	< 0.0005	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	0.00077	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
	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
	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
	5/7/2019	0.76	120	340	0.42	7.27	120	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	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
	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
	5/20/2020	0.79	110	250	0.45	7.3	110	1100	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
	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	< 0.0005	0.013	< 0.0002	0.0061	NA	< 0.0025	< 0.002
	5/18/2021	0.22	120	280	0.42	7.3	190	1100	< 0.003	0.0019	0.12	< 0.001	< 0.0005	< 0.005	0.0037	< 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	1200	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	1000	^+ < 0.003	0.0016	0.12	< 0.001	< 0.0005	< 0.005	0.0034	< 0.0005	0.013	< 0.0002	0.0057	0.877	0.003	< 0.002
	11/16/2021	0.3	130	290	0.42	7.11	140	1000	< 0.003	0.0021	0.12	^1+ < 0.001	< 0.0005	< 0.005	0.004	< 0.0005	0.011	< 0.0002	0.0059	0.892	< 0.0025	< 0.002
	3/3/2022	0.31	120	220	0.42	7.11	170	1300	< 0.003	0.0018	0.12	< 0.001	< 0.0005	< 0.005	0.0029	< 0.0005	0.012	< 0.0002	0.0056	< 0.437	< 0.0025	< 0.002
	5/26/2022	0.26	110	290	0.44	6.94	150	1100	< 0.003	0.0019	0.1	^+ < 0.001	< 0.0005	< 0.005	0.0036	< 0.0005	< 0.01	< 0.0002	< 0.005	0.624	< 0.0025	< 0.002
	8/31/2022	0.32	120	240	0.45	6.38	150	870	< 0.003	0.0016	0.11	< 0.001	< 0.0005	< 0.005	0.0018	< 0.0005	0.012	< 0.0002	0.0055	0.804	< 0.0025	< 0.002
	11/9/2022	0.34	120	240	0.61	7.08	150	940	< 0.003	0.0021	0.11	< 0.001	< 0.0005	< 0.005	0.003	^+ < 0.0005	0.012	< 0.0002	0.0056	0.666	< 0.0025	< 0.002
	2/28/2023	0.34	120	280	0.4	7.16	150	1100	< 0.003	0.0019	0.1	< 0.001	< 0.0005	< 0.005	0.0078	< 0.0005	0.011	< 0.0002	0.0058	< 0.593	< 0.0025	< 0.002
	5/3/2023	0.28	110	290	0.40	6.97	160	1100	< 0.0030	0.0014	0.095	< 0.0010	< 0.00050	< 0.0050	0.0074	< 0.00050	0.011	< 0.00020	0.0051	< 0.488	< 0.0025	< 0.0020
	7/20/2023	0.37	120	240	0.41	7.02	180	970	< 0.0030	0.0018	0.10	< 0.0010	< 0.00050	< 0.0050	0.0025	< 0.00050	0.012	< 0.00020	< 0.0050	< 0.601	0.0027	< 0.0020
	10/26/2023	0.31	120	320	0.43	6.95	140	1100	< 0.0030	0.0016	0.094	< 0.0010	< 0.00050	< 0.0050	0.0063	< 0.00050	0.013	< 0.00020	0.0052	1.15	< 0.0025	< 0.0020
MW-05 down-gradient	10/28/2015	0.64	100	160	0.39	7.12	120	790	< 0.003	0.0011	0.057	^ < 0.001	< 0.0005	< 0.005	0.0013	< 0.0005	0.018	< 0.0002	0.0088	0.6231	0.0031	< 0.002
	2/10/2016	0.46	110	220	0.39	7.25	120	790	< 0.003	0.0028	0.071	< 0.001	< 0.0005	0.0062	0.0013	0.0022	< 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	0.0022	0.014	< 0.0002	0.008	< 0.40	0.019	< 0.002
	8/31/2016	1.0	140	99	0.56	6.81	260	820	< 0.003	< 0.001	0.07	^ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.012	< 0.42	0.02	< 0.002
	11/2/2016	0.41	98	130	0.37	7.26	100	700	< 0.003	0.0022	0.056	< 0.001	< 0.0005	0.0051	< 0.001	0.0017	0.015	< 0.0002	0.0061	0.438	< 0.0025	< 0.002
	2/6/2017	0.48	150	180	0.30	7.22	120	790	< 0.003	0.0016	0.082	< 0.001	< 0.0005	< 0.005	< 0.001	0.0016	0.021	< 0.0002	< 0.005	0.564	0.0029	< 0.002
	4/26/2017	0.67	110	F1 190	0.37	7.28	170	770	< 0.003	0.0014	0.063	< 0.001	< 0.0005	< 0.005	< 0.001	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	< 0.0005	0.013	< 0.0002	0.0076	< 0.316	0.0029	< 0.002
	8/2/2017	0.28	83	170	0.35	7.30	99	770	< 0.003	< 0.001	0.054	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.014	< 0.0002	0.0053	0.659	< 0.0025	< 0.002
	10/18/2017	0.42	110	110	0.38	7.16	95	720	< 0.003	0.002	0.067	^ < 0.001	< 0.0005	< 0.005	< 0.001	0.0023	0.018	< 0.0002	< 0.005	< 0.371	0.0029	^ < 0.002
	4/24/2018	0.31	110	300	0.34	7.33	130	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	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
	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
	5/6/2019	0.38	130	500	0.31	7.11	84	1300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	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
	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
	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
	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
	10/22/2020	0.52	92	180	0.38	7.16	85	720	< 0.003	0.0012	0.069	^ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.013	< 0.0002	0.0054	NA	0.003	< 0.002
	5/18/2021	0.37	130	410	0.3	7.00	160	1300	< 0.003	0.0015	0.1	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.023	< 0.0002	< 0.005	< 0.5970	< 0.0025	< 0.002
	6/29/2021 R	NA	NA	430	NA	7.33	150	1300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/27/2021	0.36	100	300	0.3	6.94	140	960	^+ < 0.003	0.0014	0.069	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.015	< 0.0002	< 0.005	0.528	0.0027	< 0.002
	11/16/2021	0.44	120	260	0.3	7.08	140	970	< 0.003	0.0016	0.079	^1+ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.014	< 0.0002	0.0069	0.738	< 0.0025	< 0.002
	3/3/2022	0.43	110	230	0.3	7.04	140	900	< 0.003	0.0015	0.074	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.017	< 0.0002	< 0.005	0.514	< 0.0025	< 0.002
	5/26/2022	0.55	120	320	0.31	6.86	140	1100	< 0.003	0.003	0.082	^+ < 0.001	< 0.0005	< 0.005	< 0.001	0.0018	0.015	< 0.0002	< 0.005	< 0.656	0.0029	< 0.002
	8/31/2022	0.43	110	240	0.32	6.5	130	1100	< 0.003	0.0015	0.066	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.016	< 0.0002	< 0.005	< 0.421	< 0.0025	< 0.002
	11/9/2022	0.39	120	230	0.42	7	120	910	< 0.003	0.0021	0.068	< 0.001	< 0.0005	< 0.005	< 0.001	0.00093	0.015	< 0.0002	< 0.005	< 0.501	< 0.0025	< 0.002
	2/28/2023	0.60	160	130	0.35	7.15	260	980	< 0.0030	0.0019	0.080	< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.00084	0.013	< 0.00020	0.011	< 0.685	0.022	< 0.0020
	3/23/2023 R	0.46	130	NA	NA	NA	170	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/3/2023	0.50	110	270	0.30	6.96	120	910	< 0.0030	< 0.0010	0.072	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.016	< 0.00020	< 0.0050	< 0.604	0.0027	< 0.0020
	7/20/2023	0.45	110	240	0.30	6.94	120	900	< 0.0030	0.0011	0.070	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.016	< 0.00020	< 0.0050	< 0.607	< 0.0025	< 0.0020
	10/26/2023	0.42	110	220	0.32	6.96	150	910	< 0.0030	0.0012	0.073	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	0.015	< 0.00020	0.0050	1.16	0.0025	< 0.0020

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.

R - Resampled under federal rule.

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

Well ID	Date	Turbidity (NTU)
MW-03	3/2/2021	0.45
	4/10/2021	22.9
	4/25/2021	2.40
	5/18/2021	2.53
	6/11/2021	2.34
	6/29/2021	2.86
	7/19/2021	37.40
	8/9/2021	2.71
	8/30/2021	5.70
	9/27/2021	10.27
	11/16/2021	0.80
	3/3/2022	0.00
	5/26/2022	4.26
	8/31/2022	4.10
	11/9/2022	32.60
	2/28/2023	6.98
	5/3/2023	3.00
	7/20/2023	5.90
	10/26/2023	3.50
MW-04	3/2/2021	81.89
	4/10/2021	5.96
	4/25/2021	3.02
	5/18/2021	2.52
	6/11/2021	2.80
	6/29/201	3.34
	7/19/2021	47.4
	8/9/2021	4.13
	8/30/2021	18.3
	9/27/2021	1.76
	11/16/2021	4.20
	3/3/2022	0.00
	5/26/2022	1.23
	8/31/2022	3.78
	11/9/2022	43.50
	2/28/2023	62.10
	5/3/2023	6.30
	7/20/2023	6.00
	10/26/2023	1.60
MW-05	2/25/2021	1.57
	4/10/2021	8.36
	4/25/2021	2.42
	5/17/2021	5.20
	6/11/2021	14.22
	6/29/2021	5.33
	7/19/2021	26.9
	8/9/2021	3.69
	8/27/2021	8.70
	9/27/2021	14.92
	11/16/2021	8.84
	3/3/2022	3.25
	5/26/2022	1.28
	8/31/2022	8.87
	11/9/2022	63.4
	2/28/2023	58.32
	5/3/2023	2.50
	7/20/2023	6.00
	10/26/2023	1.10
MW-10	3/2/2021	26.07
	4/10/2021	7.31
	4/25/2021	5.21
	5/18/2021	3.73
	6/11/2021	6.65
	6/29/2021	9.49
	7/19/2021	14.5
	8/9/2021	10.08
	8/30/2021	9.3
	9/27/2021	16.3
	11/16/2021	5.59
	3/3/2022	2.86
	5/26/2022	2.08
	8/31/2022	2.93
	11/9/2022	19.6
	2/28/2023	17.13
	5/3/2023	2.6
	7/20/2023	5.6
	10/26/2023	1.4

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/27/2023 3:30:59 PM

JOB DESCRIPTION

Joliet #29 CCR

JOB NUMBER

500-241678-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

myEOL

Job Notes

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

Authorization

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

Table of Contents

Case Narrative

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

Job ID: 500-241678-1

Job ID: 500-241678-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-241678-1

Receipt
The samples were received on 10/26/2023 4:45 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.7º C and 5.0º C.

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

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

Method Summary

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

Job ID: 500-241678-1

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: Joliet #29 CCR

Job ID: 500-241678-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-241678-1	MW-03	Water	10/26/23 09:26	10/26/23 16:45
500-241678-2	MW-04	Water	10/26/23 11:14	10/26/23 16:45
500-241678-3	MW-05	Water	10/26/23 12:15	10/26/23 16:45
500-241678-4	MW-10	Water	10/26/23 13:27	10/26/23 16:45
500-241678-5	Duplicate	Water	10/26/23 00:00	10/26/23 16:45

Client Sample Results

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

Job ID: 500-241678-1

Client Sample ID: MW-03

Date Collected: 10/26/23 09:26
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/03/23 09:16	11/10/23 03:12	1
Arsenic	**0.0017**		0.0010		mg/L		11/03/23 09:16	11/10/23 03:12	1
Barium	**0.13**		0.0025		mg/L		11/03/23 09:16	11/10/23 03:12	1
Beryllium	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 03:12	1
Boron	**0.31**		0.050		mg/L		11/21/23 19:34	11/24/23 15:42	1
Cadmium	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:12	1
Calcium	**130**		0.20		mg/L		11/03/23 09:16	11/10/23 03:12	1
Chromium	<0.0050		0.0050		mg/L		11/03/23 09:16	11/10/23 03:12	1
Cobalt	**0.0014**		0.0010		mg/L		11/03/23 09:16	11/10/23 03:12	1
Lead	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:12	1
Lithium	**0.010**		0.010		mg/L		11/14/23 09:28	11/16/23 02:34	1
Molybdenum	<0.0050		0.0050		mg/L		11/03/23 09:16	11/10/23 03:12	1
Selenium	**0.0028**		0.0025		mg/L		11/03/23 09:16	11/10/23 03:12	1
Thallium	<0.0020		0.0020		mg/L		11/03/23 09:16	11/10/23 03:12	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/23 10:10	11/08/23 14:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**1100**		10		mg/L			11/02/23 01:13	1
Chloride (SM 4500 Cl- E)	**300**		40		mg/L			10/30/23 15:19	20
Fluoride (SM 4500 F C)	**0.40**		0.10		mg/L			11/09/23 13:32	1
Sulfate (SM 4500 SO4 E)	**170**		100		mg/L			11/13/23 13:15	20

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

Job ID: 500-241678-1

Client Sample ID: MW-04
Date Collected: 10/26/23 11:14
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/03/23 09:16	11/10/23 03:16	1
Arsenic	**0.0016**		0.0010		mg/L		11/03/23 09:16	11/10/23 03:16	1
Barium	**0.094**		0.0025		mg/L		11/03/23 09:16	11/10/23 03:16	1
Beryllium	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 03:16	1
Boron	**0.31**		0.050		mg/L		11/21/23 19:34	11/24/23 15:46	1
Cadmium	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:16	1
Calcium	**120**		0.20		mg/L		11/03/23 09:16	11/10/23 03:16	1
Chromium	<0.0050		0.0050		mg/L		11/03/23 09:16	11/10/23 03:16	1
Cobalt	**0.0063**		0.0010		mg/L		11/03/23 09:16	11/10/23 03:16	1
Lead	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:16	1
Lithium	**0.013**		0.010		mg/L		11/14/23 09:28	11/16/23 02:37	1
Molybdenum	**0.0052**		0.0050		mg/L		11/03/23 09:16	11/10/23 03:16	1
Selenium	<0.0025		0.0025		mg/L		11/03/23 09:16	11/10/23 03:16	1
Thallium	<0.0020		0.0020		mg/L		11/03/23 09:16	11/10/23 03:16	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/23 10:10	11/08/23 14:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**1100**		10		mg/L			11/02/23 01:15	1
Chloride (SM 4500 Cl- E)	**320**		40		mg/L			10/30/23 15:21	20
Fluoride (SM 4500 F C)	**0.43**		0.10		mg/L			11/09/23 13:36	1
Sulfate (SM 4500 SO4 E)	**140**		100		mg/L			11/13/23 13:16	20

Client Sample Results

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

Job ID: 500-241678-1

Client Sample ID: MW-05

Date Collected: 10/26/23 12:15
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/03/23 09:16	11/10/23 03:21	1
Arsenic	**0.0012**		0.0010		mg/L		11/03/23 09:16	11/10/23 03:21	1
Barium	**0.073**		0.0025		mg/L		11/03/23 09:16	11/10/23 03:21	1
Beryllium	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 03:21	1
Boron	**0.42**		0.050		mg/L		11/21/23 19:34	11/24/23 15:50	1
Cadmium	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:21	1
Calcium	**110**		0.20		mg/L		11/03/23 09:16	11/10/23 03:21	1
Chromium	<0.0050		0.0050		mg/L		11/03/23 09:16	11/10/23 03:21	1
Cobalt	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 03:21	1
Lead	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:21	1
Lithium	**0.015**		0.010		mg/L		11/14/23 09:28	11/16/23 02:41	1
Molybdenum	**0.0050**		0.0050		mg/L		11/03/23 09:16	11/10/23 03:21	1
Selenium	**0.0025**		0.0025		mg/L		11/03/23 09:16	11/10/23 03:21	1
Thallium	<0.0020		0.0020		mg/L		11/03/23 09:16	11/10/23 03:21	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/23 10:10	11/08/23 14:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**910**		10		mg/L			11/02/23 01:18	1
Chloride (SM 4500 Cl- E)	**220**		40		mg/L			10/30/23 15:21	20
Fluoride (SM 4500 F C)	**0.32**		0.10		mg/L			11/09/23 13:41	1
Sulfate (SM 4500 SO4 E)	**150**		100		mg/L			11/13/23 13:15	20

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

Job ID: 500-241678-1

Client Sample ID: MW-10

Date Collected: 10/26/23 13:27
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/03/23 09:16	11/10/23 03:25	1
Arsenic	**0.0011**		0.0010		mg/L		11/03/23 09:16	11/10/23 03:25	1
Barium	**0.050**		0.0025		mg/L		11/03/23 09:16	11/10/23 03:25	1
Beryllium	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 03:25	1
Boron	**0.40**		0.050		mg/L		11/21/23 19:34	11/24/23 15:54	1
Cadmium	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:25	1
Calcium	**120**		0.20		mg/L		11/03/23 09:16	11/10/23 03:25	1
Chromium	<0.0050		0.0050		mg/L		11/03/23 09:16	11/10/23 03:25	1
Cobalt	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 03:25	1
Lead	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:25	1
Lithium	**0.011**		0.010		mg/L		11/14/23 09:28	11/16/23 02:44	1
Molybdenum	**0.0064**		0.0050		mg/L		11/03/23 09:16	11/10/23 03:25	1
Selenium	<0.0025		0.0025		mg/L		11/03/23 09:16	11/10/23 03:25	1
Thallium	<0.0020		0.0020		mg/L		11/03/23 09:16	11/10/23 03:25	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/23 10:10	11/08/23 14:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**1100**		10		mg/L			11/02/23 02:10	1
Chloride (SM 4500 Cl- E)	**300**		40		mg/L			10/30/23 15:21	20
Fluoride (SM 4500 F C)	**0.41**		0.10		mg/L			11/09/23 13:46	1
Sulfate (SM 4500 SO4 E)	**160**		100		mg/L			11/13/23 13:16	20

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

Job ID: 500-241678-1

Client Sample ID: Duplicate

Date Collected: 10/26/23 00:00
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/03/23 09:16	11/10/23 03:29	1
Arsenic	**0.0017**		0.0010		mg/L		11/03/23 09:16	11/10/23 03:29	1
Barium	**0.13**		0.0025		mg/L		11/03/23 09:16	11/10/23 03:29	1
Beryllium	<0.0010		0.0010		mg/L		11/03/23 09:16	11/10/23 03:29	1
Boron	**0.31**		0.050		mg/L		11/21/23 19:34	11/24/23 15:58	1
Cadmium	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:29	1
Calcium	**130**		0.20		mg/L		11/03/23 09:16	11/10/23 03:29	1
Chromium	<0.0050		0.0050		mg/L		11/03/23 09:16	11/10/23 03:29	1
Cobalt	**0.0013**		0.0010		mg/L		11/03/23 09:16	11/10/23 03:29	1
Lead	<0.00050		0.00050		mg/L		11/03/23 09:16	11/10/23 03:29	1
Lithium	**0.011**		0.010		mg/L		11/14/23 09:28	11/16/23 02:48	1
Molybdenum	<0.0050		0.0050		mg/L		11/03/23 09:16	11/10/23 03:29	1
Selenium	**0.0025**		0.0025		mg/L		11/03/23 09:16	11/10/23 03:29	1
Thallium	<0.0020		0.0020		mg/L		11/03/23 09:16	11/10/23 03:29	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/23 10:10	11/08/23 14:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**1100**		10		mg/L			11/02/23 02:17	1
Chloride (SM 4500 Cl- E)	**290**		40		mg/L			10/30/23 15:20	20
Fluoride (SM 4500 F C)	**0.40**		0.10		mg/L			11/09/23 13:58	1
Sulfate (SM 4500 SO4 E)	**170**		100		mg/L			11/13/23 13:16	20

Definitions/Glossary

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

Job ID: 500-241678-1

Qualifiers

General Chemistry

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

Glossary

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

Metals

Prep Batch: 740389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241678-1	MW-03	Total Recoverable	Water	3005A	
500-241678-2	MW-04	Total Recoverable	Water	3005A	
500-241678-3	MW-05	Total Recoverable	Water	3005A	
500-241678-4	MW-10	Total Recoverable	Water	3005A	
500-241678-5	Duplicate	Total Recoverable	Water	3005A	
MB 500-740389/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-740389/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 740936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241678-1	MW-03	Total/NA	Water	7470A	
500-241678-2	MW-04	Total/NA	Water	7470A	
500-241678-3	MW-05	Total/NA	Water	7470A	
500-241678-4	MW-10	Total/NA	Water	7470A	
500-241678-5	Duplicate	Total/NA	Water	7470A	
MB 500-740936/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-740936/13-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 741264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241678-1	MW-03	Total/NA	Water	7470A	740936
500-241678-2	MW-04	Total/NA	Water	7470A	740936
500-241678-3	MW-05	Total/NA	Water	7470A	740936
500-241678-4	MW-10	Total/NA	Water	7470A	740936
500-241678-5	Duplicate	Total/NA	Water	7470A	740936
MB 500-740936/12-A	Method Blank	Total/NA	Water	7470A	740936
LCS 500-740936/13-A	Lab Control Sample	Total/NA	Water	7470A	740936

Analysis Batch: 741658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241678-1	MW-03	Total Recoverable	Water	6020A	740389
500-241678-2	MW-04	Total Recoverable	Water	6020A	740389
500-241678-3	MW-05	Total Recoverable	Water	6020A	740389
500-241678-4	MW-10	Total Recoverable	Water	6020A	740389
500-241678-5	Duplicate	Total Recoverable	Water	6020A	740389
MB 500-740389/1-A	Method Blank	Total Recoverable	Water	6020A	740389
LCS 500-740389/2-A	Lab Control Sample	Total Recoverable	Water	6020A	740389

Prep Batch: 742074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241678-1	MW-03	Total Recoverable	Water	3005A	
500-241678-2	MW-04	Total Recoverable	Water	3005A	
500-241678-3	MW-05	Total Recoverable	Water	3005A	
500-241678-4	MW-10	Total Recoverable	Water	3005A	
500-241678-5	Duplicate	Total Recoverable	Water	3005A	
MB 500-742074/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-742074/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 742504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241678-1	MW-03	Total Recoverable	Water	6020A	742074

Metals (Continued)

Analysis Batch: 742504 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241678-2	MW-04	Total Recoverable	Water	6020A	742074
500-241678-3	MW-05	Total Recoverable	Water	6020A	742074
500-241678-4	MW-10	Total Recoverable	Water	6020A	742074
500-241678-5	Duplicate	Total Recoverable	Water	6020A	742074
MB 500-742074/1-A	Method Blank	Total Recoverable	Water	6020A	742074
LCS 500-742074/2-A	Lab Control Sample	Total Recoverable	Water	6020A	742074

Prep Batch: 743405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241678-1	MW-03	Total Recoverable	Water	3005A	
500-241678-2	MW-04	Total Recoverable	Water	3005A	
500-241678-3	MW-05	Total Recoverable	Water	3005A	
500-241678-4	MW-10	Total Recoverable	Water	3005A	
500-241678-5	Duplicate	Total Recoverable	Water	3005A	
MB 500-743405/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-743405/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 743808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241678-1	MW-03	Total Recoverable	Water	6020A	743405
500-241678-2	MW-04	Total Recoverable	Water	6020A	743405
500-241678-3	MW-05	Total Recoverable	Water	6020A	743405
500-241678-4	MW-10	Total Recoverable	Water	6020A	743405
500-241678-5	Duplicate	Total Recoverable	Water	6020A	743405
MB 500-743405/1-A	Method Blank	Total Recoverable	Water	6020A	743405
LCS 500-743405/2-A	Lab Control Sample	Total Recoverable	Water	6020A	743405

General Chemistry

Analysis Batch: 739652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241678-1	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-241678-2	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-241678-3	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-241678-4	MW-10	Total/NA	Water	SM 4500 Cl- E	
500-241678-5	Duplicate	Total/NA	Water	SM 4500 Cl- E	
MB 500-739652/107	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-739652/108	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 740051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241678-1	MW-03	Total/NA	Water	SM 2540C	
500-241678-2	MW-04	Total/NA	Water	SM 2540C	
500-241678-3	MW-05	Total/NA	Water	SM 2540C	
MB 500-740051/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-740051/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 740052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241678-4	MW-10	Total/NA	Water	SM 2540C	
500-241678-5	Duplicate	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 740052 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-740052/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-740052/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-241678-4 MS	MW-10	Total/NA	Water	SM 2540C	
500-241678-4 DU	MW-10	Total/NA	Water	SM 2540C	
500-241678-5 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 741591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241678-1	MW-03	Total/NA	Water	SM 4500 F C	
500-241678-2	MW-04	Total/NA	Water	SM 4500 F C	
500-241678-3	MW-05	Total/NA	Water	SM 4500 F C	
500-241678-4	MW-10	Total/NA	Water	SM 4500 F C	
500-241678-5	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-741591/3	Method Blank	Total/NA	Water	SM 4500 F C	
MB 500-741591/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-741591/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCS 500-741591/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 741949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241678-1	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-241678-2	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-241678-3	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-241678-4	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-241678-5	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-741949/111	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-741949/112	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Method: 6020A - Metals (ICP/MS)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-740936/12-A
Matrix: Water
Analysis Batch: 741264

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 740936

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/07/23 10:10	11/08/23 13:39	1

Lab Sample ID: LCS 500-740936/13-A
Matrix: Water
Analysis Batch: 741264

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 740936

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00201	0.00205		mg/L		102	80 - 120

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

Lab Sample ID: MB 500-740051/1
Matrix: Water
Analysis Batch: 740051

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			11/02/23 00:19	1

Lab Sample ID: LCS 500-740051/2
Matrix: Water
Analysis Batch: 740051

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	236		mg/L		94	80 - 120

Lab Sample ID: MB 500-740052/1
Matrix: Water
Analysis Batch: 740052

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			11/02/23 02:05	1

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

Lab Sample ID: LCS 500-740052/2
Matrix: Water
Analysis Batch: 740052

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	268		mg/L		107	80 - 120		

Lab Sample ID: 500-241678-4 MS
Matrix: Water
Analysis Batch: 740052

Client Sample ID: MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids	1100		250	1290	4	mg/L		84	75 - 125		

Lab Sample ID: 500-241678-4 DU
Matrix: Water
Analysis Batch: 740052

Client Sample ID: MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1100			1070		mg/L				0.6	5

Lab Sample ID: 500-241678-5 DU
Matrix: Water
Analysis Batch: 740052

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1100			1070		mg/L				0.2	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-739652/107
Matrix: Water
Analysis Batch: 739652

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			10/30/23 15:01	1

Lab Sample ID: LCS 500-739652/108
Matrix: Water
Analysis Batch: 739652

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	21.1		mg/L		105	85 - 115		

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-741591/3
Matrix: Water
Analysis Batch: 741591

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			11/09/23 11:39	1

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: MB 500-741591/31
Matrix: Water
Analysis Batch: 741591

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			11/09/23 13:50	1

Lab Sample ID: LCS 500-741591/32
Matrix: Water
Analysis Batch: 741591

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	9.93		mg/L		99	90 - 119

Lab Sample ID: LCS 500-741591/4
Matrix: Water
Analysis Batch: 741591

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	9.96		mg/L		100	90 - 119

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-741949/111
Matrix: Water
Analysis Batch: 741949

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			11/13/23 12:47	1

Lab Sample ID: LCS 500-741949/112
Matrix: Water
Analysis Batch: 741949

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	20.0	20.0		mg/L		100	88 - 123

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

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: [illegible]	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-114453-45941 1
Client Contact: Patrick Allenstein	Phone: 630290 6850	E-Mail: Diana Mockler@et.eurofinsus com	State of Origin:	Page: Page 1 of 1
Company: KPRG and Associates, Inc.	PWSID:	Analysis Requested		Job #: 500-241678

Address: 14665 West Lisbon Road, Suite 1/	Due Date Requested
City: Brookfield	TAT Requested (days).
State, Zip: WI, 53005	Compliance Project. Δ Yes Δ No
Phone:	PO #: 4502085968
Email: patricka@kprginc com	WO #:
Project Name: Joliet #29 CCR/ Event Desc. Quarterly MWG Joliet #29 CCR	Project #: 50011568
Site: Illinois	SSOW#:

500-241678 COC

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
Y - Trizma
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, 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		
1	MW-03	10-26-23	09:26	G	Water	N	N	X	X	X	5	
2	MW-04	10-26-23	11:14	G	Water	N	N	X	X	X	5	
3	MW-05	10-26-23	12:15	G	Water	N	N	X	X	X	5	
4	MW-10	10-26-23	13:27	G	Water	N	N	X	X	X	5	
5	Duplicate	10-26-23	—	G	Water	N	N	X	X	X	5	
					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
[illegible]	10-26-23 16:45	KPRG	Stephanie Hernandez	10/26/23 1645	EETA

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 5.9→5.7, 5.2→5.0 48at

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-241678-1

Login Number: 241678
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.7,5.0
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	

Client Sample ID: MW-03

Lab Sample ID: 500-241678-1

Date Collected: 10/26/23 09:26

Matrix: Water

Date Received: 10/26/23 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			740389	BDE	EET CHI	11/03/23 09:16 - 11/03/23 09:46 [1]
Total Recoverable	Analysis	6020A		1	741658	BJH	EET CHI	11/10/23 03:12
Total Recoverable	Prep	3005A			742074	BDE	EET CHI	11/14/23 09:28 - 11/14/23 09:58 [1]
Total Recoverable	Analysis	6020A		1	742504	BJH	EET CHI	11/16/23 02:34
Total Recoverable	Prep	3005A			743405	MC	EET CHI	11/21/23 19:34 - 11/22/23 00:34 [1]
Total Recoverable	Analysis	6020A		1	743808	BJH	EET CHI	11/24/23 15:42
Total/NA	Prep	7470A			740936	MJG	EET CHI	11/07/23 10:10 - 11/07/23 12:10 [1]
Total/NA	Analysis	7470A		1	741264	MJG	EET CHI	11/08/23 14:33
Total/NA	Analysis	SM 2540C		1	740051	CLB	EET CHI	11/02/23 01:13
Total/NA	Analysis	SM 4500 Cl- E		20	739652	TR	EET CHI	10/30/23 15:19
Total/NA	Analysis	SM 4500 F C		1	741591	SO	EET CHI	11/09/23 13:32
Total/NA	Analysis	SM 4500 SO4 E		20	741949	TR	EET CHI	11/13/23 13:15

Client Sample ID: MW-04

Lab Sample ID: 500-241678-2

Date Collected: 10/26/23 11:14

Matrix: Water

Date Received: 10/26/23 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			740389	BDE	EET CHI	11/03/23 09:16 - 11/03/23 09:46 [1]
Total Recoverable	Analysis	6020A		1	741658	BJH	EET CHI	11/10/23 03:16
Total Recoverable	Prep	3005A			742074	BDE	EET CHI	11/14/23 09:28 - 11/14/23 09:58 [1]
Total Recoverable	Analysis	6020A		1	742504	BJH	EET CHI	11/16/23 02:37
Total Recoverable	Prep	3005A			743405	MC	EET CHI	11/21/23 19:34 - 11/22/23 00:34 [1]
Total Recoverable	Analysis	6020A		1	743808	BJH	EET CHI	11/24/23 15:46
Total/NA	Prep	7470A			740936	MJG	EET CHI	11/07/23 10:10 - 11/07/23 12:10 [1]
Total/NA	Analysis	7470A		1	741264	MJG	EET CHI	11/08/23 14:35
Total/NA	Analysis	SM 2540C		1	740051	CLB	EET CHI	11/02/23 01:15
Total/NA	Analysis	SM 4500 Cl- E		20	739652	TR	EET CHI	10/30/23 15:21
Total/NA	Analysis	SM 4500 F C		1	741591	SO	EET CHI	11/09/23 13:36
Total/NA	Analysis	SM 4500 SO4 E		20	741949	TR	EET CHI	11/13/23 13:16

Client Sample ID: MW-05

Lab Sample ID: 500-241678-3

Date Collected: 10/26/23 12:15

Matrix: Water

Date Received: 10/26/23 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			740389	BDE	EET CHI	11/03/23 09:16 - 11/03/23 09:46 [1]
Total Recoverable	Analysis	6020A		1	741658	BJH	EET CHI	11/10/23 03:21
Total Recoverable	Prep	3005A			742074	BDE	EET CHI	11/14/23 09:28 - 11/14/23 09:58 [1]
Total Recoverable	Analysis	6020A		1	742504	BJH	EET CHI	11/16/23 02:41
Total Recoverable	Prep	3005A			743405	MC	EET CHI	11/21/23 19:34 - 11/22/23 00:34 [1]
Total Recoverable	Analysis	6020A		1	743808	BJH	EET CHI	11/24/23 15:50
Total/NA	Prep	7470A			740936	MJG	EET CHI	11/07/23 10:10 - 11/07/23 12:10 [1]
Total/NA	Analysis	7470A		1	741264	MJG	EET CHI	11/08/23 14:37

Lab Chronicle

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

Job ID: 500-241678-1

Client Sample ID: MW-05

Date Collected: 10/26/23 12:15
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	740051	CLB	EET CHI	11/02/23 01:18
Total/NA	Analysis	SM 4500 Cl- E		20	739652	TR	EET CHI	10/30/23 15:21
Total/NA	Analysis	SM 4500 F C		1	741591	SO	EET CHI	11/09/23 13:41
Total/NA	Analysis	SM 4500 SO4 E		20	741949	TR	EET CHI	11/13/23 13:15

Client Sample ID: MW-10

Date Collected: 10/26/23 13:27
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			740389	BDE	EET CHI	11/03/23 09:16 - 11/03/23 09:46 [1]
Total Recoverable	Analysis	6020A		1	741658	BJH	EET CHI	11/10/23 03:25
Total Recoverable	Prep	3005A			742074	BDE	EET CHI	11/14/23 09:28 - 11/14/23 09:58 [1]
Total Recoverable	Analysis	6020A		1	742504	BJH	EET CHI	11/16/23 02:44
Total Recoverable	Prep	3005A			743405	MC	EET CHI	11/21/23 19:34 - 11/22/23 00:34 [1]
Total Recoverable	Analysis	6020A		1	743808	BJH	EET CHI	11/24/23 15:54
Total/NA	Prep	7470A			740936	MJG	EET CHI	11/07/23 10:10 - 11/07/23 12:10 [1]
Total/NA	Analysis	7470A		1	741264	MJG	EET CHI	11/08/23 14:39
Total/NA	Analysis	SM 2540C		1	740052	CLB	EET CHI	11/02/23 02:10
Total/NA	Analysis	SM 4500 Cl- E		20	739652	TR	EET CHI	10/30/23 15:21
Total/NA	Analysis	SM 4500 F C		1	741591	SO	EET CHI	11/09/23 13:46
Total/NA	Analysis	SM 4500 SO4 E		20	741949	TR	EET CHI	11/13/23 13:16

Client Sample ID: Duplicate

Date Collected: 10/26/23 00:00
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			740389	BDE	EET CHI	11/03/23 09:16 - 11/03/23 09:46 [1]
Total Recoverable	Analysis	6020A		1	741658	BJH	EET CHI	11/10/23 03:29
Total Recoverable	Prep	3005A			742074	BDE	EET CHI	11/14/23 09:28 - 11/14/23 09:58 [1]
Total Recoverable	Analysis	6020A		1	742504	BJH	EET CHI	11/16/23 02:48
Total Recoverable	Prep	3005A			743405	MC	EET CHI	11/21/23 19:34 - 11/22/23 00:34 [1]
Total Recoverable	Analysis	6020A		1	743808	BJH	EET CHI	11/24/23 15:58
Total/NA	Prep	7470A			740936	MJG	EET CHI	11/07/23 10:10 - 11/07/23 12:10 [1]
Total/NA	Analysis	7470A		1	741264	MJG	EET CHI	11/08/23 14:41
Total/NA	Analysis	SM 2540C		1	740052	CLB	EET CHI	11/02/23 02:17
Total/NA	Analysis	SM 4500 Cl- E		20	739652	TR	EET CHI	10/30/23 15:20
Total/NA	Analysis	SM 4500 F C		1	741591	SO	EET CHI	11/09/23 13:58
Total/NA	Analysis	SM 4500 SO4 E		20	741949	TR	EET CHI	11/13/23 13:16

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

Laboratory References:

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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/30/2023 2:52:03 PM

JOB DESCRIPTION

Joliet #29 CCR (RAD)

JOB NUMBER

500-241678-2

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

Job Notes

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

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

Authorization

Generated
11/30/2023 2:52:03 PM

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

Table of Contents

Case Narrative

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

Job ID: 500-241678-2

Job ID: 500-241678-2

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-241678-2

Receipt
The samples were received on 10/26/2023 4:45 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.7°C and 5.0°C

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

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

Method Summary

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

Job ID: 500-241678-2

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

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

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

Sample Summary

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

Job ID: 500-241678-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-241678-1	MW-03	Water	10/26/23 09:26	10/26/23 16:45
500-241678-2	MW-04	Water	10/26/23 11:14	10/26/23 16:45
500-241678-3	MW-05	Water	10/26/23 12:15	10/26/23 16:45
500-241678-4	MW-10	Water	10/26/23 13:27	10/26/23 16:45
500-241678-5	Duplicate	Water	10/26/23 00:00	10/26/23 16:45

Client Sample ID: MW-03

Date Collected: 10/26/23 09:26
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-1

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.216		0.102	0.103	1.00	0.124	pCi/L	11/01/23 11:10	11/30/23 07:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.9*		*30 - 110*	*11/01/23 11:10*	*11/30/23 07:16*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.692		0.436	0.440	1.00	0.651	pCi/L	11/01/23 11:15	11/21/23 16:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.9*		*30 - 110*	*11/01/23 11:15*	*11/21/23 16:06*	*1*
Y Carrier	*79.3*		*30 - 110*	*11/01/23 11:15*	*11/21/23 16:06*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.908		0.448	0.452	5.00	0.651	pCi/L		11/30/23 13:33	1

Client Sample ID: MW-04

Date Collected: 10/26/23 11:14
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-2

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.172		0.0830	0.0844	1.00	0.0926	pCi/L	11/01/23 11:10	11/30/23 07:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.6*		*30 - 110*	*11/01/23 11:10*	*11/30/23 07:17*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.983		0.405	0.415	1.00	0.524	pCi/L	11/01/23 11:15	11/21/23 16:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.6*		*30 - 110*	*11/01/23 11:15*	*11/21/23 16:06*	*1*
Y Carrier	*83.0*		*30 - 110*	*11/01/23 11:15*	*11/21/23 16:06*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.15		0.413	0.423	5.00	0.524	pCi/L		11/30/23 13:33	1

Client Sample ID: MW-05

Date Collected: 10/26/23 12:15
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-3

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0859	U	0.0648	0.0652	1.00	0.0909	pCi/L	11/01/23 11:10	11/30/23 07:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.0*		*30 - 110*	*11/01/23 11:10*	*11/30/23 07:17*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.08**		0.442	0.453	1.00	0.568	pCi/L	11/01/23 11:15	11/21/23 16:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.0*		*30 - 110*	*11/01/23 11:15*	*11/21/23 16:07*	*1*
Y Carrier	*69.9*		*30 - 110*	*11/01/23 11:15*	*11/21/23 16:07*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.16**		0.447	0.458	5.00	0.568	pCi/L		11/30/23 13:33	1

Client Sample ID: MW-10

Date Collected: 10/26/23 13:27
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-4

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.117		0.0758	0.0765	1.00	0.101	pCi/L	11/01/23 11:10	11/30/23 07:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.3*		*30 - 110*	*11/01/23 11:10*	*11/30/23 07:17*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.623		0.376	0.381	1.00	0.536	pCi/L	11/01/23 11:15	11/21/23 16:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.3*		*30 - 110*	*11/01/23 11:15*	*11/21/23 16:08*	*1*
Y Carrier	*71.8*		*30 - 110*	*11/01/23 11:15*	*11/21/23 16:08*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.739		0.384	0.389	5.00	0.536	pCi/L		11/30/23 13:33	1

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

Job ID: 500-241678-2

Client Sample ID: Duplicate

Date Collected: 10/26/23 00:00
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-5

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.168		0.0862	0.0875	1.00	0.104	pCi/L	11/01/23 11:10	11/30/23 07:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.8*		*30 - 110*	*11/01/23 11:10*	*11/30/23 07:17*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.615		0.402	0.406	1.00	0.599	pCi/L	11/01/23 11:15	11/21/23 16:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.8*		*30 - 110*	*11/01/23 11:15*	*11/21/23 16:08*	*1*
Y Carrier	*74.0*		*30 - 110*	*11/01/23 11:15*	*11/21/23 16:08*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.783		0.411	0.415	5.00	0.599	pCi/L		11/30/23 13:33	1

Definitions/Glossary

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

Job ID: 500-241678-2

Qualifiers

Rad

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

Glossary

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

QC Association Summary

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

Job ID: 500-241678-2

Rad

Prep Batch: 634746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241678-1	MW-03	Total/NA	Water	PrecSep-21	
500-241678-2	MW-04	Total/NA	Water	PrecSep-21	
500-241678-3	MW-05	Total/NA	Water	PrecSep-21	
500-241678-4	MW-10	Total/NA	Water	PrecSep-21	
500-241678-5	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-634746/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-634746/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-241678-1 DU	MW-03	Total/NA	Water	PrecSep-21	

Prep Batch: 634748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241678-1	MW-03	Total/NA	Water	PrecSep_0	
500-241678-2	MW-04	Total/NA	Water	PrecSep_0	
500-241678-3	MW-05	Total/NA	Water	PrecSep_0	
500-241678-4	MW-10	Total/NA	Water	PrecSep_0	
500-241678-5	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-634748/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-634748/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-241678-1 DU	MW-03	Total/NA	Water	PrecSep_0	

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

Job ID: 500-241678-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-634746/1-A
Matrix: Water
Analysis Batch: 638803

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634746

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.02090	U	0.0560	0.0561	1.00	0.104	pCi/L	11/01/23 11:10	11/30/23 07:15	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.0*		*30 - 110*	*11/01/23 11:10*	*11/30/23 07:15*	*1*

Lab Sample ID: LCS 160-634746/2-A
Matrix: Water
Analysis Batch: 638803

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634746

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			11.3	11.48		1.19	1.00	0.105	pCi/L	101	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*91.9*		*30 - 110*

Lab Sample ID: 500-241678-1 DU
Matrix: Water
Analysis Batch: 638803

Client Sample ID: MW-03
Prep Type: Total/NA
Prep Batch: 634746

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.216			0.2622		0.103	1.00	0.101	pCi/L			0.22	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*95.3*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-634748/1-A
Matrix: Water
Analysis Batch: 637608

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634748

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4482	U	0.320	0.322	1.00	0.483	pCi/L	11/01/23 11:15	11/21/23 16:05	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.0*		*30 - 110*	*11/01/23 11:15*	*11/21/23 16:05*	*1*
Y Carrier	*86.7*		*30 - 110*	*11/01/23 11:15*	*11/21/23 16:05*	*1*

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

Lab Sample ID: LCS 160-634748/2-A
Matrix: Water
Analysis Batch: 637957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634748

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			7.70	7.310		3.74	1.00	5.22	pCi/L	95	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*91.9*		*30 - 110*
Y Carrier	*70.3*		*30 - 110*

Lab Sample ID: 500-241678-1 DU
Matrix: Water
Analysis Batch: 637608

Client Sample ID: MW-03
Prep Type: Total/NA
Prep Batch: 634748

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.692			0.8508		0.428	1.00	0.590	pCi/L			0.18	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*95.3*		*30 - 110*
Y Carrier	*78.9*		*30 - 110*

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

Chain of Custody Record

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Client Information	Sampler: IAN JOHN HOWIGSON	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-114453-45941 1
Client Contact: Patrick Allenstein	Phone: 630 290 6850	E-Mail: Diana Mockler@et.eurofinsus com	State of Origin:	Page: Page 1 of 1
Company: KPRG and Associates, Inc.	PWSID:	Analysis Requested		Job #: 500-241678

Address: 14665 West Lisbon Road, Suite 1/	Due Date Requested:
City: Brookfield	TAT Requested (days):
State, Zip: WI, 53005	Compliance Project: Δ Yes Δ No
Phone:	PO #: 4502085968
Email: patricka@kprginc com	WO #:
Project Name: Joliet #29 CCR/ Event Desc. Quarterly MWG Joliet #29 CCR	Project #: 50011568
Site: Illinois	SSOW#:

500-241678 COC

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
Y - Trizma
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, 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		
1 MW-03	10-26-23	09:26	G	Water	N	N	X	X	X	5	
2 MW-04	10-26-23	11:14	G	Water	N	N	X	X	X	5	
3 MW-05	10-26-23	12:15	G	Water	N	N	X	X	X	5	
4 MW-10	10-26-23	13:27	G	Water	N	N	X	X	X	5	
5 Duplicate	10-26-23	—	G	Water	N	N	X	X	X	5	
				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
[illegible]	10-26-23 16:45	KPRG	Stephanie Hernandez	10/26/23 1645	EEIA

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 2.9→3.7, 5.2→5.0 48at

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-180816.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Diana.Mockler@et.eurofinsus.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-241678-1
Address: 13715 Rider Trail North,	Due Date Requested: 11/15/2023			
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#:			

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, Y - Trizma, Z - other (specify)
Other:

Analysis Requested

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 (500-241678-1)	10/26/23	09:26 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
MW-04 (500-241678-2)	10/26/23	11:14 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
MW-05 (500-241678-3)	10/26/23	12:15 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
MW-10 (500-241678-4)	10/26/23	13:27 Central		Water			X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;
Duplicate (500-241678-5)	10/26/23	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 Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Chicago attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago.

Possible Hazard Identification	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:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	10/27/23 1550		[signature]	10/28/23 930	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-241678-2

Login Number: 241678
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.7,5.0
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: 500-241678-2

Login Number: 241678
List Number: 2
Creator: Pinette, Meadow L

List Source: Eurofins St. Louis
List Creation: 10/30/23 02:31 PM

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

Job ID: 500-241678-2

Client Sample ID: MW-03
Date Collected: 10/26/23 09:26
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			634746	KAC	EET SL	11/01/23 11:10
Total/NA	Analysis	903.0		1	638803	FLC	EET SL	11/30/23 07:16
Total/NA	Prep	PrecSep_0			634748	KAC	EET SL	11/01/23 11:15
Total/NA	Analysis	904.0		1	637608	FLC	EET SL	11/21/23 16:06
Total/NA	Analysis	Ra226_Ra228		1	638959	SCB	EET SL	11/30/23 13:33

Client Sample ID: MW-04
Date Collected: 10/26/23 11:14
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			634746	KAC	EET SL	11/01/23 11:10
Total/NA	Analysis	903.0		1	638803	FLC	EET SL	11/30/23 07:17
Total/NA	Prep	PrecSep_0			634748	KAC	EET SL	11/01/23 11:15
Total/NA	Analysis	904.0		1	637608	FLC	EET SL	11/21/23 16:06
Total/NA	Analysis	Ra226_Ra228		1	638959	SCB	EET SL	11/30/23 13:33

Client Sample ID: MW-05
Date Collected: 10/26/23 12:15
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			634746	KAC	EET SL	11/01/23 11:10
Total/NA	Analysis	903.0		1	638803	FLC	EET SL	11/30/23 07:17
Total/NA	Prep	PrecSep_0			634748	KAC	EET SL	11/01/23 11:15
Total/NA	Analysis	904.0		1	637608	FLC	EET SL	11/21/23 16:07
Total/NA	Analysis	Ra226_Ra228		1	638959	SCB	EET SL	11/30/23 13:33

Client Sample ID: MW-10
Date Collected: 10/26/23 13:27
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			634746	KAC	EET SL	11/01/23 11:10
Total/NA	Analysis	903.0		1	638803	FLC	EET SL	11/30/23 07:17
Total/NA	Prep	PrecSep_0			634748	KAC	EET SL	11/01/23 11:15
Total/NA	Analysis	904.0		1	637608	FLC	EET SL	11/21/23 16:08
Total/NA	Analysis	Ra226_Ra228		1	638959	SCB	EET SL	11/30/23 13:33

Lab Chronicle

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

Job ID: 500-241678-2

Client Sample ID: Duplicate

Date Collected: 10/26/23 00:00
Date Received: 10/26/23 16:45

Lab Sample ID: 500-241678-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			634746	KAC	EET SL	11/01/23 11:10
Total/NA	Analysis	903.0		1	638803	FLC	EET SL	11/30/23 07:17
Total/NA	Prep	PrecSep_0			634748	KAC	EET SL	11/01/23 11:15
Total/NA	Analysis	904.0		1	637608	FLC	EET SL	11/21/23 16:08
Total/NA	Analysis	Ra226_Ra228		1	638959	SCB	EET SL	11/30/23 13:33

Laboratory References:

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

Tracer/Carrier Summary

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

Job ID: 500-241678-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)
Lab Sample ID	Client Sample ID	Ba (30-110)
500-241678-1	MW-03	89.9
500-241678-1 DU	MW-03	95.3
500-241678-2	MW-04	92.6
500-241678-3	MW-05	98.0
500-241678-4	MW-10	92.3
500-241678-5	Duplicate	92.8
LCS 160-634746/2-A	Lab Control Sample	91.9
MB 160-634746/1-A	Method Blank	96.0

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
500-241678-1	MW-03	89.9	79.3
500-241678-1 DU	MW-03	95.3	78.9
500-241678-2	MW-04	92.6	83.0
500-241678-3	MW-05	98.0	69.9
500-241678-4	MW-10	92.3	71.8
500-241678-5	Duplicate	92.8	74.0
LCS 160-634748/2-A	Lab Control Sample	91.9	70.3
MB 160-634748/1-A	Method Blank	96.0	86.7

Tracer/Carrier Legend

Ba = Ba Carrier
Y = Y Carrier

PROJECT NAME	NRG – JOLIET #29 STATION (12313.0)		DATE	10-26-23
Sample Name	MW-03	Start Time	09:11	
Condition of Well	GOOD			
Water Level	33.11	Total Depth	—	
Well Diameter	PVC – 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	COLORLESS ODORLESS	
Volume Removed	2.0 QTS.	W L at Sample Time	33.11	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCA + CCR + CCR DUP	Sample Time	09:26	
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)
09:14	33.11	7.24	15.8	2.158	84.2	132.0	0.8
09:17	33.12	6.99	14.8	2.244	70.3	126.4	2.6
09:20	33.12	6.97	14.7	2.249	67.5	124.5	3.0
09:23	33.12	6.94	14.6	2.258	64.8	122.4	3.4
09:26	33.11	6.93	14.6	2.263	62.2	120.7	3.5

SAMPLING NOTES:

Sampler Name and Company: KPRG and Associates

PROJECT NAME	NRG – JOLIET #29 STATION (12313.0)		DATE	10-26-23
Sample Name	MW-04	Start Time	11:02	
Condition of Well	Good			
Water Level	33.36	Total Depth	—	
Well Diameter	PVC – 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	COLORLESS ODORLESS	
Volume Removed	2.0 QTS.	W L at Sample Time	33.38	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCA + CCR	Sample Time	11:14	
Water Quality Meter	YSI ProDss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm).	DO (mg/L)	ORP (mV)	Turbidity (NTU)
11:05	33.38	7.06	17.1	2.186	76.0	96.6	0.9
11:08	33.38	6.98	16.2	2.175	73.1	100.0	1.1
11:11	33.38	6.96	15.4	2.240	65.4	101.5	1.3
11:14	33.38	6.95	15.3	2.256	64.4	101.2	1.6

SAMPLING NOTES:

Sampler Name and Company: KPRG and Associates

PROJECT NAME	NRG – JOLIET #29 STATION (12313.0)		DATE	10-26-23
Sample Name	MW-05	Start Time	12:03	
Condition of Well	Good			
Water Level	34.06	Total Depth	—	
Well Diameter	PVC – 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	COLORLESS ODORLESS	
Volume Removed	2.0 Ltrs.	W L at Sample Time	34.07	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCA + CCR	Sample Time	12:15	
Water Quality Meter	YSI ProDss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm).	DO (mg/L)	ORP (mV)	Turbidity (NTU)
12:06	34.07	7.16	16.4	2.062	74.6	89.3	1.3
12:09	34.07	7.04	16.9	2.051	71.2	92.1	1.4
12:12	34.08	6.99	17.0	2.047	69.0	92.7	1.2
12:15	34.07	6.96	17.0	2.039	67.4	93.0	1.1

SAMPLING NOTES:

Sampler Name and Company: KPRG and Associates

PROJECT NAME	NRG – JOLIET #29 STATION (12313.0)		DATE	10-26-23
Sample Name	MW-10	Start Time	13:12	
Condition of Well	GOOD			
Water Level	34.29	Total Depth	—	
Well Diameter	PVC – 2 inch	Volume in Well	—	
Method of Purge	Low-Flow	Purge Characteristics	COLORLESS ODORLESS	
Volume Removed	2.0 QTS.	W L at Sample Time	34.29	
Method of Sample	Low-Flow	Sample Characteristics	APPEARS CLEAR	
Sample Analysis	CCA + CCR	Sample Time	13:27	
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)
13:15	34.29	7.24	18.7	2.255	86.5	82.6	2.7
13:18	34.30	7.05	17.0	2.251	80.6	91.9	1.4
13:21	34.29	6.99	15.7	2.271	76.2	94.2	1.3
13:24	34.29	6.97	15.3	2.275	73.5	93.9	1.3
13:27	34.29	6.96	15.4	2.276	73.2	92.5	1.4

SAMPLING NOTES:

Sampler Name and Company: KPRG and Associates