

DATA SUMMARY POSTING

Station: Midwest Generation Waukegan Generating Station

Regulated Unit(s): East Pond (IEPA ID No. W0971900021-01)
 West Pond (IEPA ID No. W0971900021-02)

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 2nd quarter 2022 which includes the entire list of parameters specified under Section 845.600(a)(1) and (b). Table 1 is a summary table of all available CCR monitoring data to date 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 on 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, Waukegan Station, Waukegan, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228	Selenium	Thallium	
MW-09 up-gradient	11/4/2015	13	210	450	0.14	6.60	370	1700	< 0.003	< 0.001	0.015	^< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.081	< 0.0002	0.260	0.1818	< 0.0025	< 0.002	
	3/2/2016	35	380	720	0.11	7.02	970	2800	< 0.003	0.06	0.05	< 0.001	< 0.0005	0.043	< 0.001	0.00061	0.094	< 0.0002	0.51	< 0.36	0.025	< 0.002	
	5/3/2016	16	310	620	0.12	7.02	740	2500	< 0.003	0.0014	0.025	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.083	< 0.0002	0.63	< 0.512	0.024	< 0.002	
	8/25/2016	4.5	130	270	0.21	7.13	190	1100	0.0041	0.042	0.024	< 0.001	0.0011	0.056	0.0027	0.0012	0.049	< 0.0002	0.063	0.482	0.039	< 0.002	
	12/8/2016	15	200	330	0.18	7.01	270	1300	< 0.003	0.004	0.016	< 0.001	0.00052	< 0.005	< 0.001	< 0.0005	0.077	< 0.0002	0.24	< 0.72	0.038	< 0.002	
	2/23/2017	14	190	290	0.12	7.68	320	1300	< 0.003	0.0027	0.014	< 0.001	< 0.0005	0.059	0.0018	< 0.0005	0.068	< 0.0002	0.26	< 0.461	0.016	< 0.002	
	5/16/2017	27	160	67	0.29	8.15	420	970	< 0.003	< 0.001	0.0094	^< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.045	< 0.0002	0.51	< 0.342	0.0085	< 0.002	
	7/6/2017	21	220	430	0.13	7.18	610	1800	< 0.003	0.002	0.018	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.089	< 0.0002	0.31	< 0.316	0.021	< 0.002	
	9/13/2017	21	250	420	0.14	7.17	520	1800	< 0.003	0.0067	0.019	< 0.001	< 0.0005	0.0052	0.0017	< 0.0005	0.069	< 0.0002	0.33	0.944	0.0041	< 0.002	
	11/29/2017	26	200	390	0.13	7.05	390	1600	< 0.003	0.0017	0.015	< ^ 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.086	< 0.0002	0.47	0.625	0.042	< 0.002	
	5/31/2018	32	200	29	0.1	6.85	490	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/6/2018	30	170	23	0.11	7.33	290	930	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/15/2019	26	120	260	0.13	7.53	31	1000	< 0.003	< 0.001	0.0073	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.035	< 0.0002	0.54	< 0.433	< 0.0025	< 0.002	
	11/19/2019	22	160	17	0.16	8.04	300	750	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/22/2020	22	140	9.2	0.18	7.81	360	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/18/2020	28	250	290	0.18	7.43	420	1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/6/2021	31	170	35	0.12	7.51	420	910	< 0.003	< 0.001	0.0075	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.04	< 0.0002	0.47	< 0.614	0.023	< 0.002	
	8/19/2021	7.2	150	170	0.13	7.01	210	350	< 0.003	0.0019	0.015	< 0.001	< 0.0005	< 0.005	< ^ 0.001	0.015	0.066	< 0.0002	0.12	< 0.457	0.071	< ^ 0.002	
	11/4/2021	10	150	160	0.24	7.07	180	980	< 0.003	0.0026	0.074	< ^1+ 0.001	< 0.0005	< 0.005	0.0011	< 0.0005	0.06	< 0.0002	0.12	< 0.775	0.097	< 0.002	
	2/10/2022	9.5	190	220	0.17	7.11	270	1300	< 0.003	0.015	0.033	< 0.001	0.00076	< 0.005	0.0038	< 0.0005	0.065	< 0.0002	0.21	< 0.523	0.036	< 0.002	
5/24/2022	5.3	150	180	0.23	7.15	200	940	< 0.003	0.0019	0.02	< ^+ 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.054	< 0.0002	0.18	< 0.444	< 0.0025	< 0.002		
MW-11 up-gradient	11/5/2015	5.2	140	240	0.13	6.51	190	1100	< 0.003	0.039	0.039	^< 0.001	< 0.0005	< 0.005	< 0.001	0.001	0.055	< 0.0002	< 0.0050	0.656	< 0.0025	< 0.002	
	3/2/2016	4.0	170	240	0.1	7.16	210	1200	< 0.003	0.55	0.048	< 0.001	< 0.0005	0.0058	< 0.001	0.011	0.049	< 0.0002	< 0.0050	1.09	< 0.0025	< 0.002	
	5/5/2016	5.0	140	280	0.11	7.17	160	1000	< 0.003	0.51	0.038	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.057	< 0.0002	< 0.005	1.24	< 0.0025	< 0.002	
	8/26/2016	3.5	180	240	0.13	6.97	110	1100	< 0.003	1.1	0.05	< 0.001	< 0.0005	0.0055	< 0.001	0.0005	0.055	< 0.0002	< 0.005	1.04	< 0.0025	< 0.002	
	12/7/2016	3.0	170	270	0.12	7.06	110	1200	< 0.003	0.87	0.049	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.038	< 0.0002	< 0.005	1.87	< 0.0025	< 0.002	
	2/24/2017	2.4	180	220	4.9	6.61	170	1200	< 0.003	0.58	0.047	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.039	< 0.0002	< 0.005	0.982	< 0.0025	< 0.002	
	5/18/2017	1.8	160	170	0.12	7.42	120	1000	< 0.003	0.5	0.047	^< 0.001	< 0.0005	0.0056	< 0.001	< 0.0005	0.036	< 0.0002	< 0.005	1.31	< 0.0025	< 0.002	
	7/6/2017	2.4	160	190	0.14	7.33	130	1100	< 0.003	0.69	0.056	< 0.001	< 0.0005	0.0057	< 0.001	< 0.0005	0.041	< 0.0002	< 0.005	0.889	< 0.0025	< 0.002	
	9/13/2017	1.9	140	150	0.26	7.16	96	870	< 0.003	0.86	0.036	< 0.001	< 0.0005	0.008	< 0.001	< 0.00071	0.037	< 0.0002	0.0054	0.718	< 0.0025	< 0.002	
	11/30/2017	2.2	170	200	0.14	6.99	93	1100	< 0.003	0.59	0.05	< ^ 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.041	< 0.0002	< 0.005	1.21	< 0.0025	< 0.002	
	5/31/2018	1.5	210	160	0.1	6.74	130	1100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/6/2018	2.3	170	150	0.12	7.21	78	990	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/15/2019	3.2	120	260	0.13	7.14	31	1000	< 0.003	0.3	0.048	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.038	< 0.0002	< 0.005	1.5	< 0.0025	< 0.002	
	11/19/2019	4.1	130	200	0.15	7.51	29	860	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/22/2020	3.2	110	150	0.15	7.16	47	740	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/19/2020	2.3	140	130	0.2	7.00	28	800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/6/2021	2.4	130	120	0.15	7.13	45	770	< 0.003	0.44	0.044	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.038	< 0.0002	< 0.005	1.7	< 0.0025	< 0.002	
	8/19/2021	1.3	140	88	0.16	6.95	45	730	< 0.003	1.1	0.055	< 0.001	< 0.0005	0.0057	< ^+ 0.001	< 0.0005	0.033	< 0.0002	< 0.005	1.89	< 0.0025	< ^ 0.002	
	11/4/2021	1.6	130	100	0.16	6.80	45	740	< 0.003	0.9	0.052	< ^1+ 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.037	< 0.0002	0.0058	1.35	< ^6+ ^+ 0.0025	< 0.002	
	2/10/2022	1.2	150	87	0.17	7.12	44	860	< 0.003	0.68	0.051	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.032	< 0.0002	< 0.005	0.839	< 0.0025	< 0.002	
5/24/2022	1.8	150	95	0.14	6.78	21	820	< 0.003	0.18	0.041	< ^+ 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.037	< 0.0002	< 0.005	1.21	< 0.0025	< 0.002		
MW-14 up-gradient	11/5/2015	1.4	150	190	0.19	6.78	140	1000	< 0.003	0.19	0.052	^< 0.001	< 0.0005	0.01	0.0012	< 0.0005	0.025	< 0.0002	< 0.005	0.7087	< 0.0025	< 0.002	
	3/2/2016	0.93	150	110	0.17	7.24	150	870	0.015	4.3	0.12	< 0.001	< 0.0005	1.1	0.0036	0.00668	0.019	< 0.0002	< 0.005	1.36	< 0.0025	< 0.002	
	5/5/2016	1.2	170	120	0.18	7.17	190	980	< 0.003	0.35	0.054	< 0.001	< 0.0005	0.017	0.0014	< 0.0005	0.021	< 0.0002	< 0.005	< 0.488	< 0.0025	< 0.002	
	8/26/2016	1.5	200	210	0.12	7.00	190	1300	< 0.003	1.0	0.058	< 0.001	< 0.0005	0.021	< 0.001	< 0.0005	0.026	< 0.0002	< 0.005	0.75	< 0.0025	< 0.002	
	12/7/2016	0.95	240	340	0.25	6.81	120	1100	0.0096	19	0.42	< 0.001	0.00089	4.6	0.0025	0.00084	0.022	< 0.0002	0.0094	< 0.866	0.014	< 0.002	
	2/23/2017	0.73	150	99	0.19	6.88	110	730	0.0061	9.3	0.36	< 0.001											

Table 1. Groundwater Analytical Results - Midwest Generation, LLC, Waukegan Station, Waukegan, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228	Selenium	Thallium	
MW-02 down-gradient	11/2/2015	3.0	32	47	0.78	8.27	230	460	< 0.003	0.014	0.016	^ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0630	0.4628	< 0.0025	< 0.002	
	3/1/2016	4.1	39	47	1.3	8.57	220	510	< 0.003	0.011	0.02	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.078	0.529	< 0.0025	< 0.002	
	5/4/2016	3.3	34	51	1.5	8.19	180	440	< 0.003	0.0081	0.018	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.069	< 0.425	< 0.0025	< 0.002	
	8/23/2016	3.1	42	59	1.3	7.52	250	500	< 0.003	0.0082	0.016	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.010	< 0.0002	0.056	< 0.439	< 0.0025	< 0.002	
	12/5/2016	3.1	28	56	1.0	8.62	160	430	< 0.003	0.018	0.015	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.071	0.509	< 0.0025	< 0.002	
	2/21/2017	3.3	31	52	0.76	8.75	190	420	< 0.003	0.028	0.012	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.051	< 0.416	0.0038	< 0.002	
	5/15/2017	3.6	85	48	0.64	8.33	320	640	< 0.003	0.02	0.029	^ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.047	< 0.425	0.023	< 0.002	
	7/5/2017	4.2	100	52	0.42	7.92	300	710	< 0.003	0.0094	0.031	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.047	< 0.295	0.017	< 0.002	
	9/14/2017	2.5	87	54	0.44	8.19	340	780	< 0.003	0.012	0.035	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.049	0.769	0.0052	< 0.002	
	11/27/2017	3.4	69	57	0.62	7.34	200	570	< 0.003	0.011	0.022	< ^ 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.048	< 0.442	< 0.0025	< 0.002	
	5/29/2018	4.5	160	43	0.40	6.85	420	990	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/5/2018	3.1	77	59	0.61	8.06	180	610	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/14/2019	2.9	47	49	1.0	8.30	140	430	< 0.003	0.0094	0.013	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.069	0.37	< 0.0025	< 0.002	
	11/19/2019	4.7	140	43	0.7	7.37	270	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/21/2020	3.4	86	48	1.0	8.02	250	580	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/17/2020	4.0	79	20	0.8	7.67	310	610	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/5/2021	4.6	70	37	0.7	8.39	190	420	< 0.003	0.008	0.03	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.023	0.97	< 0.0025	< 0.002	
	8/18/2021	4.1	84	39	0.5	7.92	190	480	< 0.003	0.0088	0.029	< 0.001	< 0.0005	< 0.005	< ^ 0.001	< 0.0005	< 0.01	< 0.0002	0.021	< 0.525	< 0.0025	< ^ 0.002	
	11/3/2021	4.2	59	43	0.6	7.78	170	410	< 0.003	0.009	0.025	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< ^ 0.01	< 0.0002	0.03	0.763	< 0.0025	< 0.002	
	2/8/2022	0.2	71	34	0.5	8.00	200	580	< 0.003	0.021	0.025	< 0.001	< 0.0005	< 0.005	< 0.001	0.00069	0.0055	< 0.0002	0.028	0.64	< 0.0025	< 0.002	
5/23/2022	3.5	77	30	0.46	8.12	190	510	< 0.003	0.02	0.03	< ^ 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.024	0.66	0.0035	< 0.002		
MW-03 down-gradient	11/2/2015	2.3	72	87	0.51	9.26	270	570	< 0.003	0.0068	0.011	^ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0370	0.071	< 0.0025	< 0.002	
	3/1/2016	2.9	61	70	0.33	7.33	220	530	< 0.003	0.0069	0.015	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0560	< 0.332	0.0043	< 0.002	
	5/4/2016	2.4	42	74	0.56	7.25	170	470	< 0.003	0.007	0.011	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.058	< 0.48	< 0.0025	< 0.002	
	8/24/2016	2.0	70	59	0.3	9.13	200	430	< 0.003	0.010	0.0069	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.042	< 0.428	< 0.0025	< 0.002	
	12/5/2016	2.4	57	60	0.41	7.62	120	440	< 0.003	0.0065	0.0094	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.010	< 0.0002	0.044	< 0.526	< 0.0025	< 0.002	
	2/21/2017	2.2	56	65	0.33	7.56	180	460	< 0.003	0.011	0.0067	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.010	< 0.0002	0.043	0.437	< 0.0025	< 0.002	
	5/16/2017	3.9	110	61	0.27	7.90	320	820	< 0.003	0.0087	0.039	^ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.010	< 0.0002	0.041	< 0.461	0.014	< 0.002	
	7/5/2017	3.0	60	60	0.28	7.46	200	470	< 0.003	0.0029	0.017	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.010	< 0.0002	0.058	< 0.304	0.0045	< 0.002	
	9/14/2017	2.1	86	57	0.26	7.53	260	680	< 0.003	0.0024	0.026	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.010	< 0.0002	0.056	0.462	0.0081	< 0.002	
	11/28/2017	2.6	69	63	0.56	6.96	120	500	< 0.003	0.0025	0.016	< ^ 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.010	< 0.0002	0.057	1.17	< 0.0025	< 0.002	
	5/29/2018	2.4	67	61	0.38	6.84	190	480	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	11/5/2018	2.4	54	54	0.5	8.99	150	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	5/14/2019	4.2	86	17	0.59	7.21	270	660	< 0.003	0.0059	0.022	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.010	< 0.0002	0.053	0.657	0.0061	< 0.002	
	11/19/2019	4.2	130	15	0.25	7.47	300	740	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4/21/2020	3.8	120	23	0.29	6.87	270	660	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	11/17/2020	3.8	120	53	0.29	7.05	240	650	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	5/5/2021	3.3	110	43	0.23	7.18	210	550	< 0.003	0.0066	0.035	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.010	< 0.0002	0.016	0.689	0.0065	< 0.002	
	8/18/2021	3	150	46	0.17	6.9	250	690	< 0.003	0.0052	0.041	< 0.001	< 0.0005	< 0.005	< ^ 0.001	< 0.0005	< 0.010	< 0.00031	0.045	0.656	< 0.0025	< ^ 0.002	
	11/3/2021	3.2	120	40	0.18	7.05	250	600	< 0.003	0.0071	0.036	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< ^ 0.010	< 0.0002	0.025	< 0.438	0.0093	< 0.002	
	2/8/2022	2.6	91	31	0.3	7.16	210	580	< 0.003	0.0053	0.028	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.002	< 0.0002	0.031	0.792	0.0062	< 0.002	
5/23/2022	2.4	79	32	0.23	8.72	170	430	< 0.003	0.016	0.016	< ^ 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.025	< 0.534	0.0031	< 0.002		
MW-04 down-gradient	11/3/2015	1.8	66	62	0.51	6.68	240	480	< 0.003	0.0066	0.032	^ < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.031	0.2732	< 0.0025	< 0.002	
	3/1/2016	2.0	58	51	0.5	7.17	170	450	< 0.003	0.0083	0.033	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.048	0.478	< 0.0025	< 0.002	
	5/4/2016	1.6	44	49	0.61	6.92	140	340	< 0.003	0.0083	0.017	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.046	< 0.542	< 0.0025	< 0.002	
	8/24/2016	2.0	46	58	0.56	7.01	120	370	< 0.003	0.0099	0.019	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.049	< 0.461	< 0.0025	< 0.002	
	12/5/2016	3.4	200	60	0.21	7.40	300	1000	< 0.003	0.019	0.13	< 0.001	< 0.0005	< 0.005	< 0.0010	< 0.0005	< 0.01	< 0.0002	0.0997	1.04	0.02	< 0.002	
	2/22/2017	2.4	150	41	0.17	7.44</																	

Table 2. Groundwater Turbidity - Midwest Generation, LLC, Waukegan Station, Waukegan, IL.

Well	Date	Turbidity (NTU)
MW-09	3/3/2021	4.70
	3/30/2021	10.15
	5/6/2021	3.44
	5/27/2021	12.41
	6/18/2021	27.7
	7/8/2021	28.77
	8/19/2021	77.36
	9/29/2021	18.41
	11/4/2021	12.66
	2/10/2022	34.39
5/24/2022	170.87	
MW-11	3/2/2021	2.20
	3/30/2021	6.08
	5/6/2021	2.34
	5/27/2021	2.69
	6/18/2021	13.7
	7/8/2021	4.71
	8/19/2021	139.34
	9/29/2021	402.9
	11/4/2021	152.7
	2/10/2022	13.8
5/24/2022	2.18	
MW-14	3/2/2021	2035
	3/30/2021	151.5
	5/6/2021	901.4
	5/27/2021	2385.61
	6/18/2021	69.25
	7/8/2021	73.18
	8/19/2021	77.04
	9/29/2021	8.42
	11/4/2021	7.42
	2/10/2022	81.72
5/24/2022	43.52	
MW-01	3/1/2021	0.59
	3/30/2021	5.72
	5/5/2021	1.42
	5/27/2021	2.02
	6/18/2021	2.33
	7/8/2021	3.60
	8/18/2021	2.33
	9/29/2021	3.03
	11/3/2021	3.05
	2/8/2022	4.60
5/23/2022	2.92	
MW-02	3/1/2021	0.69
	3/30/2021	5.66
	5/5/2021	1.65
	5/27/2021	2.95
	6/18/2021	2.71
	7/8/2021	4.20
	8/18/2021	9.03
	9/29/2021	3.42
	11/3/2021	4.05
	2/8/2022	13.4
5/23/2022	30.54	
MW-03	3/1/2021	0.75
	3/30/2021	5.73
	5/5/2021	1.71
	5/27/2021	2.02
	6/18/2021	2.56
	7/8/2021	3.74
	8/18/2021	2.60
	9/29/2021	2.82
	11/3/2021	3.26
	2/8/2022	8.27
5/23/2022	4.11	
MW-04	3/1/2021	1.30
	3/30/2021	6.21
	5/5/2021	1.77
	5/27/2021	2.73
	6/18/2021	3.69
	7/8/2021	5.36
	8/18/2021	40.61
	9/29/2021	3.48
	11/3/2021	4.26
	2/8/2022	13.32
5/23/2022	28.94	
MW-16	3/1/2021	0.77
	3/30/2021	6.07
	5/6/2021	1.63
	5/27/2021	2.00
	6/18/2021	2.59
	7/8/2021	3.58
	8/18/2021	3.22
	9/29/2021	6.05
	11/4/2021	4.00
	2/8/2022	21.6
5/23/2022	11.75	

ANALYTICAL REPORT

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

Laboratory Job ID: 500-217068-1
Client Project/Site: Waukegan CCR Q2

For:
KPRG and Associates, Inc.
14665 West Lisbon Road,
Suite 1A
Brookfield, Wisconsin 53005

Attn: Richard Gnat



Authorized for release by:
6/14/2022 10:40:30 AM

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

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

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

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Case Narrative

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Job ID: 500-217068-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-217068-1

Comments

No additional comments.

Receipt

The samples were received on 5/24/2022 1:55 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were -0.1° C, 3.4° C and 8.6° C.

Receipt Exceptions

One or more containers for the following samples were received broken or leaking: MW-01 (500-217068-1), MW-02 (500-217068-2), MW-03 (500-217068-3), MW-04 (500-217068-4), MW-16 (500-217068-5), Duplicate (500-217068-6), MW-09 (500-217068-7), MW-11 (500-217068-8) and MW-14 (500-217068-9). sample 500-217068-D-1 was received with a pin sized hole in the bottom, so we transferred it into a plastic 1 liter bottle and a little over 900mL was salvaged.

The following samples were received at the laboratory outside the required temperature criteria: MW-09 (500-217068-7), MW-11 (500-217068-8) and MW-14 (500-217068-9). This does not meet regulatory requirements. The client was contacted regarding this issue, and the laboratory was instructed to <CHOOSE_ONE> proceed with/cancel analysis.

Metals

Method 6020A: The low level continuing calibration verification (CCVL) at line 107, associated with batch 500-660498 recovered above the upper control limit for Beryllium. The samples associated with this CCVL were non-detects for the affected analytes; therefore, the data have been reported.

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

General Chemistry

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

Method Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Method	Method Description	Protocol	Laboratory
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 Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-217068-1	MW-01	Water	05/23/22 10:59	05/24/22 13:55
500-217068-2	MW-02	Water	05/23/22 11:53	05/24/22 13:55
500-217068-3	MW-03	Water	05/23/22 12:45	05/24/22 13:55
500-217068-4	MW-04	Water	05/23/22 13:57	05/24/22 13:55
500-217068-5	MW-16	Water	05/23/22 15:05	05/24/22 13:55
500-217068-6	Duplicate	Water	05/23/22 00:00	05/24/22 13:55
500-217068-7	MW-09	Water	05/24/22 11:10	05/26/22 15:45
500-217068-8	MW-11	Water	05/24/22 09:10	05/26/22 15:45
500-217068-9	MW-14	Water	05/24/22 10:08	05/26/22 15:45

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Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Client Sample ID: MW-01

Lab Sample ID: 500-217068-1

Date Collected: 05/23/22 10:59

Matrix: Water

Date Received: 05/24/22 13:55

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		06/06/22 16:08	06/08/22 21:29	1
Arsenic	0.018		0.0010		mg/L		06/06/22 16:08	06/08/22 21:29	1
Barium	0.053		0.0025		mg/L		06/06/22 16:08	06/08/22 21:29	1
Beryllium	<0.0010	^+	0.0010		mg/L		06/06/22 16:08	06/08/22 21:29	1
Boron	3.3		0.50		mg/L		06/06/22 16:08	06/09/22 13:20	10
Cadmium	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:29	1
Calcium	94		0.20		mg/L		06/06/22 16:08	06/08/22 21:29	1
Chromium	<0.0050		0.0050		mg/L		06/06/22 16:08	06/08/22 21:29	1
Cobalt	<0.0010		0.0010		mg/L		06/06/22 16:08	06/08/22 21:29	1
Lead	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:29	1
Lithium	<0.010		0.010		mg/L		06/06/22 16:08	06/08/22 21:29	1
Molybdenum	0.026		0.0050		mg/L		06/06/22 16:08	06/08/22 21:29	1
Selenium	<0.0025		0.0025		mg/L		06/06/22 16:08	06/08/22 21:29	1
Thallium	<0.0020		0.0020		mg/L		06/06/22 16:08	06/08/22 21:29	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/03/22 09:55	06/06/22 07:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	490		10		mg/L			05/25/22 02:40	1
Chloride	34		4.0		mg/L			05/27/22 12:57	2
Fluoride	0.20		0.10		mg/L			05/27/22 22:31	1
Sulfate	200		50		mg/L			05/27/22 14:56	10

Client Sample ID: MW-02

Lab Sample ID: 500-217068-2

Date Collected: 05/23/22 11:53

Matrix: Water

Date Received: 05/24/22 13:55

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		06/06/22 16:08	06/08/22 21:33	1
Arsenic	0.020		0.0010		mg/L		06/06/22 16:08	06/08/22 21:33	1
Barium	0.030		0.0025		mg/L		06/06/22 16:08	06/08/22 21:33	1
Beryllium	<0.0010	^+	0.0010		mg/L		06/06/22 16:08	06/08/22 21:33	1
Boron	3.5		0.50		mg/L		06/06/22 16:08	06/09/22 13:23	10
Cadmium	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:33	1
Calcium	77		0.20		mg/L		06/06/22 16:08	06/08/22 21:33	1
Chromium	<0.0050		0.0050		mg/L		06/06/22 16:08	06/08/22 21:33	1
Cobalt	<0.0010		0.0010		mg/L		06/06/22 16:08	06/08/22 21:33	1
Lead	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:33	1
Lithium	<0.010		0.010		mg/L		06/06/22 16:08	06/08/22 21:33	1
Molybdenum	0.024		0.0050		mg/L		06/06/22 16:08	06/08/22 21:33	1
Selenium	0.0035		0.0025		mg/L		06/06/22 16:08	06/08/22 21:33	1
Thallium	<0.0020		0.0020		mg/L		06/06/22 16:08	06/08/22 21:33	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/03/22 09:55	06/06/22 07:52	1

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Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Client Sample ID: MW-02
Date Collected: 05/23/22 11:53
Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	510		10		mg/L			05/25/22 02:43	1
Chloride	30		4.0		mg/L			05/27/22 12:57	2
Fluoride	0.46		0.10		mg/L			05/27/22 22:34	1
Sulfate	190		50		mg/L			05/27/22 14:27	10

Client Sample ID: MW-03
Date Collected: 05/23/22 12:45
Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/06/22 16:08	06/08/22 21:36	1
Arsenic	0.016		0.0010		mg/L		06/06/22 16:08	06/08/22 21:36	1
Barium	0.016		0.0025		mg/L		06/06/22 16:08	06/08/22 21:36	1
Beryllium	<0.0010	^+	0.0010		mg/L		06/06/22 16:08	06/08/22 21:36	1
Boron	2.4		0.50		mg/L		06/06/22 16:08	06/09/22 13:27	10
Cadmium	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:36	1
Calcium	79		0.20		mg/L		06/06/22 16:08	06/08/22 21:36	1
Chromium	<0.0050		0.0050		mg/L		06/06/22 16:08	06/08/22 21:36	1
Cobalt	<0.0010		0.0010		mg/L		06/06/22 16:08	06/08/22 21:36	1
Lead	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:36	1
Lithium	<0.010		0.010		mg/L		06/06/22 16:08	06/08/22 21:36	1
Molybdenum	0.025		0.0050		mg/L		06/06/22 16:08	06/08/22 21:36	1
Selenium	0.0031		0.0025		mg/L		06/06/22 16:08	06/08/22 21:36	1
Thallium	<0.0020		0.0020		mg/L		06/06/22 16:08	06/08/22 21:36	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/03/22 09:55	06/06/22 07:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	430		10		mg/L			05/25/22 02:45	1
Chloride	32		4.0		mg/L			05/27/22 12:58	2
Fluoride	0.23		0.10		mg/L			06/11/22 22:41	1
Sulfate	170		50		mg/L			05/27/22 14:28	10

Client Sample ID: MW-04
Date Collected: 05/23/22 13:57
Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/06/22 16:08	06/08/22 21:40	1
Arsenic	0.012		0.0010		mg/L		06/06/22 16:08	06/08/22 21:40	1
Barium	0.038		0.0025		mg/L		06/06/22 16:08	06/08/22 21:40	1
Beryllium	<0.0010	^+	0.0010		mg/L		06/06/22 16:08	06/08/22 21:40	1
Boron	2.5		0.50		mg/L		06/06/22 16:08	06/09/22 13:30	10
Cadmium	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:40	1
Calcium	81		0.20		mg/L		06/06/22 16:08	06/08/22 21:40	1
Chromium	<0.0050		0.0050		mg/L		06/06/22 16:08	06/08/22 21:40	1

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Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Client Sample ID: MW-04

Lab Sample ID: 500-217068-4

Date Collected: 05/23/22 13:57

Matrix: Water

Date Received: 05/24/22 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.0010		0.0010		mg/L		06/06/22 16:08	06/08/22 21:40	1
Lead	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:40	1
Lithium	<0.010		0.010		mg/L		06/06/22 16:08	06/08/22 21:40	1
Molybdenum	0.019		0.0050		mg/L		06/06/22 16:08	06/08/22 21:40	1
Selenium	<0.0025		0.0025		mg/L		06/06/22 16:08	06/08/22 21:40	1
Thallium	<0.0020		0.0020		mg/L		06/06/22 16:08	06/08/22 21:40	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/03/22 09:55	06/06/22 07:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	510		10		mg/L			05/25/22 02:48	1
Chloride	41		4.0		mg/L			05/27/22 12:59	2
Fluoride	0.61		0.10		mg/L			06/11/22 22:45	1
Sulfate	150		50		mg/L			05/27/22 14:28	10

Client Sample ID: MW-16

Lab Sample ID: 500-217068-5

Date Collected: 05/23/22 15:05

Matrix: Water

Date Received: 05/24/22 13:55

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		06/06/22 16:08	06/08/22 21:43	1
Arsenic	0.0010		0.0010		mg/L		06/06/22 16:08	06/08/22 21:43	1
Barium	0.031		0.0025		mg/L		06/06/22 16:08	06/08/22 21:43	1
Beryllium	<0.0010	^+	0.0010		mg/L		06/06/22 16:08	06/08/22 21:43	1
Boron	3.6		0.50		mg/L		06/06/22 16:08	06/09/22 13:34	10
Cadmium	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:43	1
Calcium	170		0.20		mg/L		06/06/22 16:08	06/08/22 21:43	1
Chromium	<0.0050		0.0050		mg/L		06/06/22 16:08	06/08/22 21:43	1
Cobalt	<0.0010		0.0010		mg/L		06/06/22 16:08	06/08/22 21:43	1
Lead	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:43	1
Lithium	0.028		0.010		mg/L		06/06/22 16:08	06/08/22 21:43	1
Molybdenum	0.022		0.0050		mg/L		06/06/22 16:08	06/08/22 21:43	1
Selenium	0.033		0.0025		mg/L		06/06/22 16:08	06/08/22 21:43	1
Thallium	<0.0020		0.0020		mg/L		06/06/22 16:08	06/08/22 21:43	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/03/22 09:55	06/06/22 07:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		10		mg/L			05/25/22 02:50	1
Chloride	62		4.0		mg/L			05/27/22 12:59	2
Fluoride	0.53		0.10		mg/L			06/11/22 22:48	1
Sulfate	420		50		mg/L			05/27/22 14:29	10

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Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Client Sample ID: Duplicate

Lab Sample ID: 500-217068-6

Date Collected: 05/23/22 00:00

Matrix: Water

Date Received: 05/24/22 13:55

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		06/06/22 16:08	06/08/22 21:47	1
Arsenic	0.0086		0.0010		mg/L		06/06/22 16:08	06/08/22 21:47	1
Barium	0.040		0.0025		mg/L		06/06/22 16:08	06/08/22 21:47	1
Beryllium	<0.0010	^+	0.0010		mg/L		06/06/22 16:08	06/08/22 21:47	1
Boron	2.6		0.50		mg/L		06/06/22 16:08	06/09/22 13:37	10
Cadmium	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:47	1
Calcium	90		0.20		mg/L		06/06/22 16:08	06/08/22 21:47	1
Chromium	<0.0050		0.0050		mg/L		06/06/22 16:08	06/08/22 21:47	1
Cobalt	<0.0010		0.0010		mg/L		06/06/22 16:08	06/08/22 21:47	1
Lead	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:47	1
Lithium	<0.010		0.010		mg/L		06/06/22 16:08	06/08/22 21:47	1
Molybdenum	0.019		0.0050		mg/L		06/06/22 16:08	06/08/22 21:47	1
Selenium	<0.0025		0.0025		mg/L		06/06/22 16:08	06/08/22 21:47	1
Thallium	<0.0020		0.0020		mg/L		06/06/22 16:08	06/08/22 21:47	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/03/22 09:55	06/06/22 08:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	550		10		mg/L			05/25/22 02:53	1
Chloride	41		4.0		mg/L			05/27/22 13:29	2
Fluoride	0.59		0.10		mg/L			06/11/22 22:50	1
Sulfate	160		50		mg/L			05/27/22 15:12	10

Client Sample ID: MW-09

Lab Sample ID: 500-217068-7

Date Collected: 05/24/22 11:10

Matrix: Water

Date Received: 05/26/22 15:45

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		06/06/22 16:08	06/08/22 21:50	1
Arsenic	0.0019		0.0010		mg/L		06/06/22 16:08	06/08/22 21:50	1
Barium	0.020		0.0025		mg/L		06/06/22 16:08	06/08/22 21:50	1
Beryllium	<0.0010	^+	0.0010		mg/L		06/06/22 16:08	06/08/22 21:50	1
Boron	5.3		1.0		mg/L		06/06/22 16:08	06/09/22 13:41	20
Cadmium	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:50	1
Calcium	150		0.20		mg/L		06/06/22 16:08	06/08/22 21:50	1
Chromium	<0.0050		0.0050		mg/L		06/06/22 16:08	06/08/22 21:50	1
Cobalt	<0.0010		0.0010		mg/L		06/06/22 16:08	06/08/22 21:50	1
Lead	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:50	1
Lithium	0.054		0.010		mg/L		06/06/22 16:08	06/08/22 21:50	1
Molybdenum	0.18		0.0050		mg/L		06/06/22 16:08	06/08/22 21:50	1
Selenium	<0.0025		0.0025		mg/L		06/06/22 16:08	06/08/22 21:50	1
Thallium	<0.0020		0.0020		mg/L		06/06/22 16:08	06/08/22 21:50	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/03/22 09:55	06/06/22 08:03	1

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Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Client Sample ID: MW-09
Date Collected: 05/24/22 11:10
Date Received: 05/26/22 15:45

Lab Sample ID: 500-217068-7
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	940		10		mg/L			05/31/22 00:22	1
Chloride	180		20		mg/L			05/27/22 13:29	10
Fluoride	0.23		0.10		mg/L			06/11/22 22:54	1
Sulfate	200		50		mg/L			05/27/22 15:13	10

Client Sample ID: MW-11
Date Collected: 05/24/22 09:10
Date Received: 05/26/22 15:45

Lab Sample ID: 500-217068-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/06/22 16:08	06/08/22 21:54	1
Arsenic	0.18		0.0010		mg/L		06/06/22 16:08	06/08/22 21:54	1
Barium	0.041		0.0025		mg/L		06/06/22 16:08	06/08/22 21:54	1
Beryllium	<0.0010	^+	0.0010		mg/L		06/06/22 16:08	06/08/22 21:54	1
Boron	1.8		0.25		mg/L		06/06/22 16:08	06/09/22 13:44	5
Cadmium	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:54	1
Calcium	150		0.20		mg/L		06/06/22 16:08	06/08/22 21:54	1
Chromium	<0.0050		0.0050		mg/L		06/06/22 16:08	06/08/22 21:54	1
Cobalt	<0.0010		0.0010		mg/L		06/06/22 16:08	06/08/22 21:54	1
Lead	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:54	1
Lithium	0.037		0.010		mg/L		06/06/22 16:08	06/08/22 21:54	1
Molybdenum	<0.0050		0.0050		mg/L		06/06/22 16:08	06/08/22 21:54	1
Selenium	<0.0025		0.0025		mg/L		06/06/22 16:08	06/08/22 21:54	1
Thallium	<0.0020		0.0020		mg/L		06/06/22 16:08	06/08/22 21:54	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/03/22 09:55	06/06/22 08:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	820		10		mg/L			05/31/22 00:29	1
Chloride	95		20		mg/L			05/27/22 13:30	10
Fluoride	0.14		0.10		mg/L			06/11/22 22:57	1
Sulfate	21		10		mg/L			05/27/22 15:13	2

Client Sample ID: MW-14
Date Collected: 05/24/22 10:08
Date Received: 05/26/22 15:45

Lab Sample ID: 500-217068-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0038		0.0030		mg/L		06/06/22 16:08	06/08/22 22:04	1
Arsenic	0.60		0.0010		mg/L		06/06/22 16:08	06/08/22 22:04	1
Barium	0.042		0.0025		mg/L		06/06/22 16:08	06/08/22 22:04	1
Beryllium	<0.0010	^+	0.0010		mg/L		06/06/22 16:08	06/08/22 22:04	1
Boron	0.62		0.050		mg/L		06/06/22 16:08	06/09/22 13:54	1
Cadmium	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 22:04	1
Calcium	120		0.20		mg/L		06/06/22 16:08	06/08/22 22:04	1
Chromium	0.028		0.0050		mg/L		06/06/22 16:08	06/08/22 22:04	1

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Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Client Sample ID: MW-14

Lab Sample ID: 500-217068-9

Date Collected: 05/24/22 10:08

Matrix: Water

Date Received: 05/26/22 15:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.0010		0.0010		mg/L		06/06/22 16:08	06/08/22 22:04	1
Lead	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 22:04	1
Lithium	0.012		0.010		mg/L		06/06/22 16:08	06/08/22 22:04	1
Molybdenum	0.0053		0.0050		mg/L		06/06/22 16:08	06/08/22 22:04	1
Selenium	<0.0025		0.0025		mg/L		06/06/22 16:08	06/08/22 22:04	1
Thallium	<0.0020		0.0020		mg/L		06/06/22 16:08	06/08/22 22:04	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/03/22 09:55	06/06/22 08:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	570		10		mg/L			05/31/22 00:34	1
Chloride	33		4.0		mg/L			05/27/22 13:30	2
Fluoride	0.17		0.10		mg/L			06/11/22 23:11	1
Sulfate	43		10		mg/L			05/27/22 15:14	2

Definitions/Glossary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Qualifiers

Metals

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

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

QC Association Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Metals

Prep Batch: 659755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217068-1	MW-01	Total/NA	Water	7470A	
500-217068-2	MW-02	Total/NA	Water	7470A	
500-217068-3	MW-03	Total/NA	Water	7470A	
500-217068-4	MW-04	Total/NA	Water	7470A	
500-217068-5	MW-16	Total/NA	Water	7470A	
500-217068-6	Duplicate	Total/NA	Water	7470A	
500-217068-7	MW-09	Total/NA	Water	7470A	
500-217068-8	MW-11	Total/NA	Water	7470A	
500-217068-9	MW-14	Total/NA	Water	7470A	
MB 500-659755/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-659755/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-217068-7 MS	MW-09	Total/NA	Water	7470A	
500-217068-7 MSD	MW-09	Total/NA	Water	7470A	
500-217068-7 DU	MW-09	Total/NA	Water	7470A	

Analysis Batch: 659994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217068-1	MW-01	Total/NA	Water	7470A	659755
500-217068-2	MW-02	Total/NA	Water	7470A	659755
500-217068-3	MW-03	Total/NA	Water	7470A	659755
500-217068-4	MW-04	Total/NA	Water	7470A	659755
500-217068-5	MW-16	Total/NA	Water	7470A	659755
500-217068-6	Duplicate	Total/NA	Water	7470A	659755
500-217068-7	MW-09	Total/NA	Water	7470A	659755
500-217068-8	MW-11	Total/NA	Water	7470A	659755
500-217068-9	MW-14	Total/NA	Water	7470A	659755
MB 500-659755/12-A	Method Blank	Total/NA	Water	7470A	659755
LCS 500-659755/13-A	Lab Control Sample	Total/NA	Water	7470A	659755
500-217068-7 MS	MW-09	Total/NA	Water	7470A	659755
500-217068-7 MSD	MW-09	Total/NA	Water	7470A	659755
500-217068-7 DU	MW-09	Total/NA	Water	7470A	659755

Prep Batch: 660019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217068-1	MW-01	Total Recoverable	Water	3005A	
500-217068-2	MW-02	Total Recoverable	Water	3005A	
500-217068-3	MW-03	Total Recoverable	Water	3005A	
500-217068-4	MW-04	Total Recoverable	Water	3005A	
500-217068-5	MW-16	Total Recoverable	Water	3005A	
500-217068-6	Duplicate	Total Recoverable	Water	3005A	
500-217068-7	MW-09	Total Recoverable	Water	3005A	
500-217068-8	MW-11	Total Recoverable	Water	3005A	
500-217068-9	MW-14	Total Recoverable	Water	3005A	
MB 500-660019/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-660019/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 660498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217068-1	MW-01	Total Recoverable	Water	6020A	660019
500-217068-2	MW-02	Total Recoverable	Water	6020A	660019
500-217068-3	MW-03	Total Recoverable	Water	6020A	660019

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QC Association Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Metals (Continued)

Analysis Batch: 660498 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217068-4	MW-04	Total Recoverable	Water	6020A	660019
500-217068-5	MW-16	Total Recoverable	Water	6020A	660019
500-217068-6	Duplicate	Total Recoverable	Water	6020A	660019
500-217068-7	MW-09	Total Recoverable	Water	6020A	660019
500-217068-8	MW-11	Total Recoverable	Water	6020A	660019
500-217068-9	MW-14	Total Recoverable	Water	6020A	660019
MB 500-660019/1-A	Method Blank	Total Recoverable	Water	6020A	660019
LCS 500-660019/2-A	Lab Control Sample	Total Recoverable	Water	6020A	660019

Analysis Batch: 660585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217068-1	MW-01	Total Recoverable	Water	6020A	660019
500-217068-2	MW-02	Total Recoverable	Water	6020A	660019
500-217068-3	MW-03	Total Recoverable	Water	6020A	660019
500-217068-4	MW-04	Total Recoverable	Water	6020A	660019
500-217068-5	MW-16	Total Recoverable	Water	6020A	660019
500-217068-6	Duplicate	Total Recoverable	Water	6020A	660019
500-217068-7	MW-09	Total Recoverable	Water	6020A	660019
500-217068-8	MW-11	Total Recoverable	Water	6020A	660019
500-217068-9	MW-14	Total Recoverable	Water	6020A	660019
MB 500-660019/1-A	Method Blank	Total Recoverable	Water	6020A	660019
LCS 500-660019/2-A	Lab Control Sample	Total Recoverable	Water	6020A	660019

General Chemistry

Analysis Batch: 658373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217068-1	MW-01	Total/NA	Water	SM 2540C	
500-217068-2	MW-02	Total/NA	Water	SM 2540C	
500-217068-3	MW-03	Total/NA	Water	SM 2540C	
500-217068-4	MW-04	Total/NA	Water	SM 2540C	
500-217068-5	MW-16	Total/NA	Water	SM 2540C	
500-217068-6	Duplicate	Total/NA	Water	SM 2540C	
MB 500-658373/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-658373/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 658951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217068-1	MW-01	Total/NA	Water	SM 4500 CI- E	
500-217068-2	MW-02	Total/NA	Water	SM 4500 CI- E	
500-217068-3	MW-03	Total/NA	Water	SM 4500 CI- E	
500-217068-4	MW-04	Total/NA	Water	SM 4500 CI- E	
500-217068-5	MW-16	Total/NA	Water	SM 4500 CI- E	
500-217068-6	Duplicate	Total/NA	Water	SM 4500 CI- E	
500-217068-7	MW-09	Total/NA	Water	SM 4500 CI- E	
500-217068-8	MW-11	Total/NA	Water	SM 4500 CI- E	
500-217068-9	MW-14	Total/NA	Water	SM 4500 CI- E	
MB 500-658951/100	Method Blank	Total/NA	Water	SM 4500 CI- E	
MB 500-658951/58	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-658951/101	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
LCS 500-658951/59	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	

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QC Association Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

General Chemistry (Continued)

Analysis Batch: 658951 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217068-6 MS	Duplicate	Total/NA	Water	SM 4500 Cl- E	
500-217068-6 MSD	Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 658956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217068-1	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-217068-2	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-217068-3	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-217068-4	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-217068-5	MW-16	Total/NA	Water	SM 4500 SO4 E	
500-217068-6	Duplicate	Total/NA	Water	SM 4500 SO4 E	
500-217068-7	MW-09	Total/NA	Water	SM 4500 SO4 E	
500-217068-8	MW-11	Total/NA	Water	SM 4500 SO4 E	
500-217068-9	MW-14	Total/NA	Water	SM 4500 SO4 E	
MB 500-658956/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
MB 500-658956/58	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-658956/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
LCS 500-658956/59	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-217068-6 MS	Duplicate	Total/NA	Water	SM 4500 SO4 E	
500-217068-6 MSD	Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 659084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217068-1	MW-01	Total/NA	Water	SM 4500 F C	
500-217068-2	MW-02	Total/NA	Water	SM 4500 F C	
MB 500-659084/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-659084/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 659110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217068-7	MW-09	Total/NA	Water	SM 2540C	
500-217068-8	MW-11	Total/NA	Water	SM 2540C	
500-217068-9	MW-14	Total/NA	Water	SM 2540C	
MB 500-659110/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-659110/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-217068-7 MS	MW-09	Total/NA	Water	SM 2540C	
500-217068-7 DU	MW-09	Total/NA	Water	SM 2540C	
500-217068-8 DU	MW-11	Total/NA	Water	SM 2540C	

Analysis Batch: 660856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217068-3	MW-03	Total/NA	Water	SM 4500 F C	
500-217068-4	MW-04	Total/NA	Water	SM 4500 F C	
500-217068-5	MW-16	Total/NA	Water	SM 4500 F C	
500-217068-6	Duplicate	Total/NA	Water	SM 4500 F C	
500-217068-7	MW-09	Total/NA	Water	SM 4500 F C	
500-217068-8	MW-11	Total/NA	Water	SM 4500 F C	
500-217068-9	MW-14	Total/NA	Water	SM 4500 F C	
MB 500-660856/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-660856/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

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QC Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-660019/1-A
Matrix: Water
Analysis Batch: 660498

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 660019

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0030		0.0030		mg/L		06/06/22 16:08	06/08/22 21:22	1
Arsenic	<0.0010		0.0010		mg/L		06/06/22 16:08	06/08/22 21:22	1
Barium	<0.0025		0.0025		mg/L		06/06/22 16:08	06/08/22 21:22	1
Beryllium	<0.0010	^+	0.0010		mg/L		06/06/22 16:08	06/08/22 21:22	1
Cadmium	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:22	1
Calcium	<0.20		0.20		mg/L		06/06/22 16:08	06/08/22 21:22	1
Chromium	<0.0050		0.0050		mg/L		06/06/22 16:08	06/08/22 21:22	1
Cobalt	<0.0010		0.0010		mg/L		06/06/22 16:08	06/08/22 21:22	1
Lead	<0.00050		0.00050		mg/L		06/06/22 16:08	06/08/22 21:22	1
Lithium	<0.010		0.010		mg/L		06/06/22 16:08	06/08/22 21:22	1
Molybdenum	<0.0050		0.0050		mg/L		06/06/22 16:08	06/08/22 21:22	1
Selenium	<0.0025		0.0025		mg/L		06/06/22 16:08	06/08/22 21:22	1
Thallium	<0.0020		0.0020		mg/L		06/06/22 16:08	06/08/22 21:22	1

Lab Sample ID: MB 500-660019/1-A
Matrix: Water
Analysis Batch: 660585

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 660019

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Boron	<0.050		0.050		mg/L		06/06/22 16:08	06/09/22 13:13	1

Lab Sample ID: LCS 500-660019/2-A
Matrix: Water
Analysis Batch: 660498

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 660019

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.100	0.0996		mg/L		100	80 - 120
Barium	0.500	0.506		mg/L		101	80 - 120
Beryllium	0.0500	0.0526	^+	mg/L		105	80 - 120
Cadmium	0.0500	0.0513		mg/L		103	80 - 120
Calcium	10.0	9.64		mg/L		96	80 - 120
Chromium	0.200	0.209		mg/L		105	80 - 120
Cobalt	0.500	0.523		mg/L		105	80 - 120
Lead	0.100	0.103		mg/L		103	80 - 120
Lithium	0.100	0.103		mg/L		103	80 - 120
Molybdenum	1.00	0.949		mg/L		95	80 - 120
Selenium	0.100	0.102		mg/L		102	80 - 120
Thallium	0.100	0.102		mg/L		102	80 - 120

Lab Sample ID: LCS 500-660019/2-A
Matrix: Water
Analysis Batch: 660585

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 660019

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

QC Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-659755/12-A
Matrix: Water
Analysis Batch: 659994

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 659755

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/03/22 09:55	06/06/22 07:46	1

Lab Sample ID: LCS 500-659755/13-A
Matrix: Water
Analysis Batch: 659994

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 659755

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00200	0.00210		mg/L		105	80 - 120

Lab Sample ID: 500-217068-7 MS
Matrix: Water
Analysis Batch: 659994

Client Sample ID: MW-09
Prep Type: Total/NA
Prep Batch: 659755

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.00020		0.00100	0.000904		mg/L		90	75 - 125

Lab Sample ID: 500-217068-7 MSD
Matrix: Water
Analysis Batch: 659994

Client Sample ID: MW-09
Prep Type: Total/NA
Prep Batch: 659755

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.00020		0.00100	0.000895		mg/L		90	75 - 125	1	20

Lab Sample ID: 500-217068-7 DU
Matrix: Water
Analysis Batch: 659994

Client Sample ID: MW-09
Prep Type: Total/NA
Prep Batch: 659755

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

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

Lab Sample ID: MB 500-658373/1
Matrix: Water
Analysis Batch: 658373

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			05/25/22 01:54	1

Lab Sample ID: LCS 500-658373/2
Matrix: Water
Analysis Batch: 658373

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	276		mg/L		110	80 - 120

QC Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

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

Lab Sample ID: MB 500-659110/1
Matrix: Water
Analysis Batch: 659110

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			05/30/22 23:51	1

Lab Sample ID: LCS 500-659110/2
Matrix: Water
Analysis Batch: 659110

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: 500-217068-7 MS
Matrix: Water
Analysis Batch: 659110

Client Sample ID: MW-09
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	940		250	1240		mg/L		120	75 - 125

Lab Sample ID: 500-217068-7 DU
Matrix: Water
Analysis Batch: 659110

Client Sample ID: MW-09
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	940		930		mg/L		1	5

Lab Sample ID: 500-217068-8 DU
Matrix: Water
Analysis Batch: 659110

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	820		792		mg/L		3	5

Method: SM 4500 CI- E - Chloride, Total

Lab Sample ID: MB 500-658951/100
Matrix: Water
Analysis Batch: 658951

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			05/27/22 13:28	1

Lab Sample ID: MB 500-658951/58
Matrix: Water
Analysis Batch: 658951

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			05/27/22 12:51	1

QC Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

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

Lab Sample ID: LCS 500-658951/101
Matrix: Water
Analysis Batch: 658951

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	20.8		mg/L		104	85 - 115

Lab Sample ID: LCS 500-658951/59
Matrix: Water
Analysis Batch: 658951

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	20.7		mg/L		103	85 - 115

Lab Sample ID: 500-217068-6 MS
Matrix: Water
Analysis Batch: 658951

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	41		20.0	58.8		mg/L		87	75 - 125

Lab Sample ID: 500-217068-6 MSD
Matrix: Water
Analysis Batch: 658951

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	41		20.0	58.5		mg/L		86	75 - 125	0	20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-659084/31
Matrix: Water
Analysis Batch: 659084

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			05/27/22 21:39	1

Lab Sample ID: LCS 500-659084/32
Matrix: Water
Analysis Batch: 659084

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

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

Lab Sample ID: MB 500-660856/3
Matrix: Water
Analysis Batch: 660856

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			06/11/22 21:45	1

QC Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 500-660856/4
Matrix: Water
Analysis Batch: 660856

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	10.5		mg/L		105	90 - 119

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-658956/16
Matrix: Water
Analysis Batch: 658956

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			05/27/22 14:19	1

Lab Sample ID: MB 500-658956/58
Matrix: Water
Analysis Batch: 658956

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			05/27/22 15:11	1

Lab Sample ID: LCS 500-658956/17
Matrix: Water
Analysis Batch: 658956

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	20.4		mg/L		102	88 - 123

Lab Sample ID: LCS 500-658956/59
Matrix: Water
Analysis Batch: 658956

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	20.6		mg/L		103	88 - 123

Lab Sample ID: 500-217068-6 MS
Matrix: Water
Analysis Batch: 658956

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	160		20.0	177	4	mg/L		96	75 - 125

Lab Sample ID: 500-217068-6 MSD
Matrix: Water
Analysis Batch: 658956

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	160		20.0	177	4	mg/L		95	75 - 125	0	20

Chain of Custody Record

Client Information		Sampler: <i>Mitchel Dolan + Kaelyn Scott</i>		Lab PM: Mockler Diana J		Carrier Tracking No(s)		COC No: 500-91227-40689 1	
Client Contact: Mitchel Dolan		Phone: <i>262-622-1143</i>		E Mail: Diana Mockler@Eurofinset.com		State of Origin: <i>IL</i>		Page: Page 1 of 1	
Company: KPRG and Associates Inc		PWSID		Analysis Request				Job #: <i>500 217068</i>	
Address: 14665 West Lisbon Road Suite 1A		Due Date Requested		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 6010C - Lithium 6020A - 13 elements 7470A - Mercury 2540C - TDS 4500FC - Fluoride SM00CLE - Chloride SM4500SO4 - Sulfate 903 - Rad 226 904 - Rad 228 Rad Combined		Total Number of containers 500-217068 COC		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:	
City: Brookfield		TAT Requested (days)							
State/Zip: WI 53005		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No							
Phone: 262-781-0475(Tel)		PO #: 4502012555							
Email: mitcheld@kprginc.com		WO #							
Project Name: Quarterly Waukegan CCR		Project #: 50011597							
Site: Illinois		SSOW#							
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	
								Preservation Code	
								D N N N N D D D	
1 <i>MW-01</i>		<i>5/23/22</i>		<i>1059</i>		<i>G</i>		<i>W</i>	
2 <i>MW-02</i>		<i>5/23/22</i>		<i>1153</i>		<i>G</i>		<i>W</i>	
3 <i>MW-03</i>		<i>5/23/22</i>		<i>1245</i>		<i>G</i>		<i>W</i>	
4 <i>MW-04</i>		<i>5/23/22</i>		<i>1357</i>		<i>G</i>		<i>W</i>	
5 <i>MW-16</i>		<i>5/23/22</i>		<i>1505</i>		<i>G</i>		<i>W</i>	
6 <i>Duplicate</i>		<i>5/23/22</i>		<i>-</i>		<i>G</i>		<i>W</i>	
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested I II III IV Other (specify)					Special Instructions/QC Requirements				
Empty Kit Relinquished by		Date		Time		Method of Shipment			
Relinquished by: <i>MPO</i>		Date/Time: <i>5/23/22 / 1700</i>		Company: <i>KPRG</i>		Received by: <i>FEDEX</i>		Date/Time: <i>5/23/22 / 1700</i>	
Relinquished by:		Date/Time:		Company:		Received by: <i>thin scott</i>		Date/Time: <i>1355</i>	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: <i>4.0 -> 3.4, 0.04 -> 0.1</i>					

Eurofins TestAmerica, Chicago

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

Chain of Custody Record



Client Information		Sampler: <i>Kaelyn Sperle & Mitchell Dolan</i>		Lab PM: Mockler Diana J		Carrier Tracking No(s)		COC No: 500-91227-40689 1																															
Client Contact: Mitchel Dolan		Phone: <i>262-781-0475</i>		E-Mail: Diana Mockler@Eurofinset.com		State of Origin: <i>IL</i>		Page: Page 1 of 1																															
Company: KPRG and Associates Inc		PWSID		Analysis Requested						Job #: <i>500-217088</i>																													
Address: 14665 West Lisbon Road Suite 1A		Due Date Requested		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		6010C - Lithium 6020A - 13 elements 7470A - Mercury		2540C - TDS		4500FC - Fluoride		SM00CLE - Chloride		SM4500SO4 - Sulfate		903 - Rad 226		904 - Rad 228		Rad Combined		Preservation Codes															
City: Brookfield		TAT Requested (days)																						A HCL M Hexane				B NaOH N None											
State Zip: WI 53005		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No																						C Zn Acetate O AsNaO2				D Nitric Acid P Na2O4S											
Phone: 262-781-0475(Tel)		PO #: 4502012555																						E NaHSO4 Q Na2SO3				F MeOH R Na2S2O3											
Email: mitcheld@kprginc.com		WO #		G Amchlor S H2SO4				H Ascorbic Acid T TSP Dodecahydrate																															
Project Name: Quarterly Waukegan CCR		Project #: 50011597		I Ice U Acetone				J DI Water V MCAA																															
Site: Illinois		SSOW#		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/soil, BT=Tissue, A=Air)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		6010C - Lithium		6020A - 13 elements		7470A - Mercury		2540C - TDS		4500FC - Fluoride		SM00CLE - Chloride		SM4500SO4 - Sulfate		903 - Rad 226		904 - Rad 228		Rad Combined		Total Number of containers		Special Instructions/Note			
																																				*Metals List Sb,As,Ba,Be,B,Cd,Ca,Cr,Co,Pb,Mo,Se,Tl			
<i>MW-09</i>		<i>5/24/22</i>		<i>1110</i>		<i>G W</i>		<i>W</i>		<i>N N</i>		<i>X X</i>		<i>X X</i>		<i>X X</i>		<i>X X</i>		<i>X X</i>		<i>X X</i>		<i>X X</i>		<i>X X</i>		<i>X X</i>		<i>X X</i>		<i>X X</i>							
<i>MW-11</i>		<i>5/24/22</i>		<i>0910</i>		<i>G W</i>		<i>W</i>		<i>N N</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>							
<i>MW-14</i>		<i>5/24/22</i>		<i>1008</i>		<i>G W</i>		<i>W</i>		<i>N N</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>							
Possible Hazard Identification										Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)																													
<input type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological										<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																													
Deliverable Requested I II III IV Other (specify)										Special Instructions/QC Requirements																													
Empty Kit Relinquished by					Date					Time					Method of Shipment																								
Relinquished by: <i>Kaelyn Sperle</i>					Date/Time: <i>5/24/22/1700</i>					Company: <i>KPRG</i>					Received by: <i>FedEx</i>					Date/Time: <i>5/24/22/1700</i>					Company: <i>FedEx</i>														
Relinquished by:					Date/Time:					Company:					Received by: <i>[Signature]</i>					Date/Time: <i>5/26/22 1545</i>					Company: <i>[Signature]</i>														
Relinquished by:					Date/Time:					Company:					Received by:					Date/Time:					Company:														
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No					Custody Seal No					Cooler Temperature(s) °C and Other Remarks: <i>9.0 → 8.6</i>																													

5009

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Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-217068-1

Login Number: 217068

List Number: 1

Creator: Hernandez, Stephanie

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	True	3.4,-0.1 Samples not frozen8.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Client Sample ID: MW-01
Date Collected: 05/23/22 10:59
Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	660498	06/08/22 21:29	FXG	TAL CHI
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		10	660585	06/09/22 13:20	FXG	TAL CHI
Total/NA	Prep	7470A			659755	06/03/22 09:55	MJG	TAL CHI
Total/NA	Analysis	7470A		1	659994	06/06/22 07:50	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	658373	05/25/22 02:40	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	658951	05/27/22 12:57	LP	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	659084	05/27/22 22:31	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	658956	05/27/22 14:56	LP	TAL CHI

Client Sample ID: MW-02
Date Collected: 05/23/22 11:53
Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	660498	06/08/22 21:33	FXG	TAL CHI
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		10	660585	06/09/22 13:23	FXG	TAL CHI
Total/NA	Prep	7470A			659755	06/03/22 09:55	MJG	TAL CHI
Total/NA	Analysis	7470A		1	659994	06/06/22 07:52	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	658373	05/25/22 02:43	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	658951	05/27/22 12:57	LP	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	659084	05/27/22 22:34	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	658956	05/27/22 14:27	LP	TAL CHI

Client Sample ID: MW-03
Date Collected: 05/23/22 12:45
Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	660498	06/08/22 21:36	FXG	TAL CHI
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		10	660585	06/09/22 13:27	FXG	TAL CHI
Total/NA	Prep	7470A			659755	06/03/22 09:55	MJG	TAL CHI
Total/NA	Analysis	7470A		1	659994	06/06/22 07:55	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	658373	05/25/22 02:45	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	658951	05/27/22 12:58	LP	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	660856	06/11/22 22:41	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	658956	05/27/22 14:28	LP	TAL CHI

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Client Sample ID: MW-04
Date Collected: 05/23/22 13:57
Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	660498	06/08/22 21:40	FXG	TAL CHI
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		10	660585	06/09/22 13:30	FXG	TAL CHI
Total/NA	Prep	7470A			659755	06/03/22 09:55	MJG	TAL CHI
Total/NA	Analysis	7470A		1	659994	06/06/22 07:57	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	658373	05/25/22 02:48	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	658951	05/27/22 12:59	LP	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	660856	06/11/22 22:45	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	658956	05/27/22 14:28	LP	TAL CHI

Client Sample ID: MW-16
Date Collected: 05/23/22 15:05
Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	660498	06/08/22 21:43	FXG	TAL CHI
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		10	660585	06/09/22 13:34	FXG	TAL CHI
Total/NA	Prep	7470A			659755	06/03/22 09:55	MJG	TAL CHI
Total/NA	Analysis	7470A		1	659994	06/06/22 07:59	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	658373	05/25/22 02:50	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	658951	05/27/22 12:59	LP	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	660856	06/11/22 22:48	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	658956	05/27/22 14:29	LP	TAL CHI

Client Sample ID: Duplicate
Date Collected: 05/23/22 00:00
Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	660498	06/08/22 21:47	FXG	TAL CHI
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		10	660585	06/09/22 13:37	FXG	TAL CHI
Total/NA	Prep	7470A			659755	06/03/22 09:55	MJG	TAL CHI
Total/NA	Analysis	7470A		1	659994	06/06/22 08:01	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	658373	05/25/22 02:53	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	658951	05/27/22 13:29	LP	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	660856	06/11/22 22:50	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	658956	05/27/22 15:12	LP	TAL CHI

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Client Sample ID: MW-09

Lab Sample ID: 500-217068-7

Date Collected: 05/24/22 11:10

Matrix: Water

Date Received: 05/26/22 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	660498	06/08/22 21:50	FXG	TAL CHI
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		20	660585	06/09/22 13:41	FXG	TAL CHI
Total/NA	Prep	7470A			659755	06/03/22 09:55	MJG	TAL CHI
Total/NA	Analysis	7470A		1	659994	06/06/22 08:03	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	659110	05/31/22 00:22	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		10	658951	05/27/22 13:29	LP	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	660856	06/11/22 22:54	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	658956	05/27/22 15:13	LP	TAL CHI

Client Sample ID: MW-11

Lab Sample ID: 500-217068-8

Date Collected: 05/24/22 09:10

Matrix: Water

Date Received: 05/26/22 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	660498	06/08/22 21:54	FXG	TAL CHI
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		5	660585	06/09/22 13:44	FXG	TAL CHI
Total/NA	Prep	7470A			659755	06/03/22 09:55	MJG	TAL CHI
Total/NA	Analysis	7470A		1	659994	06/06/22 08:17	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	659110	05/31/22 00:29	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		10	658951	05/27/22 13:30	LP	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	660856	06/11/22 22:57	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	658956	05/27/22 15:13	LP	TAL CHI

Client Sample ID: MW-14

Lab Sample ID: 500-217068-9

Date Collected: 05/24/22 10:08

Matrix: Water

Date Received: 05/26/22 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	660498	06/08/22 22:04	FXG	TAL CHI
Total Recoverable	Prep	3005A			660019	06/06/22 16:08	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	660585	06/09/22 13:54	FXG	TAL CHI
Total/NA	Prep	7470A			659755	06/03/22 09:55	MJG	TAL CHI
Total/NA	Analysis	7470A		1	659994	06/06/22 08:19	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	659110	05/31/22 00:34	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	658951	05/27/22 13:30	LP	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	660856	06/11/22 23:11	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	658956	05/27/22 15:14	LP	TAL CHI

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Laboratory References:

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

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Accreditation/Certification Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-1

Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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ANALYTICAL REPORT

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

Laboratory Job ID: 500-217068-2
Client Project/Site: Waukegan CCR Q2

For:
KPRG and Associates, Inc.
14665 West Lisbon Road,
Suite 1A
Brookfield, Wisconsin 53005

Attn: Richard Gnat



Authorized for release by:
6/24/2022 2:03:44 PM

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

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

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



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Case Narrative

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

Job ID: 500-217068-2

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-217068-2

Comments

No additional comments.

Receipt

The samples were received on 5/24/2022 1:55 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were -0.1° C, 3.4° C and 8.6° C.

Receipt Exceptions

One or more containers for the following samples were received broken or leaking: MW-01 (500-217068-1), MW-02 (500-217068-2), MW-03 (500-217068-3), MW-04 (500-217068-4), MW-16 (500-217068-5), Duplicate (500-217068-6), MW-09 (500-217068-7), MW-11 (500-217068-8) and MW-14 (500-217068-9). sample 500-217068-D-1 was received with a pin sized hole in the bottom, so we transferred it into a plastic 1 liter bottle and a little over 900mL was salvaged.

The following samples were received at the laboratory outside the required temperature criteria: MW-09 (500-217068-7), MW-11 (500-217068-8) and MW-14 (500-217068-9). This does not meet regulatory requirements. The client was contacted regarding this issue, and the laboratory was instructed to <CHOOSE_ONE> proceed with/cancel analysis.

RAD

Method 903.0: Radium-226 batch 567407:

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

MW-01 (500-217068-1), MW-02 (500-217068-2), MW-03 (500-217068-3), MW-04 (500-217068-4), MW-16 (500-217068-5), Duplicate (500-217068-6), (LCS 160-567407/1-A), (MB 160-567407/16-A) and (500-217068-E-1-A DU)

Method 903.0: Radium-226 batch 567685

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-09 (500-217068-7), MW-11 (500-217068-8), MW-14 (500-217068-9), (LCS 160-567685/1-A), (MB 160-567685/22-A), (500-217043-G-15-A) and (500-217043-F-15-A DU)

Methods 900.0, 903.0, 904.0, 9310, 9315, 9320, ST-RC-0058: Gross Alpha Beta batch 571212

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.

(CCB 160-571083/51), (CCB 160-571083/52), (CCB 160-571084/33), (CCVA 160-571083/36), (CCVA 160-571083/37), (CCVA 160-571083/38), (CCVA 160-571084/4), (CCVB 160-571083/44), (CCVB 160-571083/45), (CCVB 160-571083/46) and (CCVB 160-571084/17)

Method 904.0: Radium-228 batch 567410

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

MW-01 (500-217068-1), MW-02 (500-217068-2), MW-03 (500-217068-3), MW-04 (500-217068-4), MW-16 (500-217068-5), Duplicate (500-217068-6), (LCS 160-567410/1-A), (MB 160-567410/16-A) and (500-217068-E-1-B DU)

Method 904.0: Radium-228 BATCH 567697

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-09 (500-217068-7), MW-11 (500-217068-8), MW-14 (500-217068-9), (LCS 160-567697/1-A), (MB 160-567697/22-A), (500-217043-G-15-B) and (500-217043-F-15-B DU)

Case Narrative

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

Job ID: 500-217068-2 (Continued)

Laboratory: Eurofins Chicago (Continued)

Method PrecSep_0:

Method PrecSep-21:

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

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Method Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

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

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Sample Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-217068-1	MW-01	Water	05/23/22 10:59	05/24/22 13:55
500-217068-2	MW-02	Water	05/23/22 11:53	05/24/22 13:55
500-217068-3	MW-03	Water	05/23/22 12:45	05/24/22 13:55
500-217068-4	MW-04	Water	05/23/22 13:57	05/24/22 13:55
500-217068-5	MW-16	Water	05/23/22 15:05	05/24/22 13:55
500-217068-6	Duplicate	Water	05/23/22 00:00	05/24/22 13:55
500-217068-7	MW-09	Water	05/24/22 11:10	05/26/22 15:45
500-217068-8	MW-11	Water	05/24/22 09:10	05/26/22 15:45
500-217068-9	MW-14	Water	05/24/22 10:08	05/26/22 15:45

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Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

Client Sample ID: MW-01

Lab Sample ID: 500-217068-1

Date Collected: 05/23/22 10:59

Matrix: Water

Date Received: 05/24/22 13:55

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	<0.256	U	0.160	0.160	1.00	0.256	pCi/L	05/26/22 10:39	06/17/22 08:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.0		40 - 110					05/26/22 10:39	06/17/22 08:34	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	<0.434	U	0.223	0.223	1.00	0.434	pCi/L	05/26/22 10:58	06/15/22 11:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.0		40 - 110					05/26/22 10:58	06/15/22 11:35	1
Y Carrier	85.2		40 - 110					05/26/22 10:58	06/15/22 11:35	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	<0.434	U	0.274	0.274	5.00	0.434	pCi/L		06/24/22 13:34	1

Client Sample ID: MW-02

Lab Sample ID: 500-217068-2

Date Collected: 05/23/22 11:53

Matrix: Water

Date Received: 05/24/22 13:55

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	<0.195	U	0.110	0.111	1.00	0.195	pCi/L	05/26/22 10:39	06/17/22 08:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.8		40 - 110					05/26/22 10:39	06/17/22 08:35	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	0.595		0.374	0.378	1.00	0.549	pCi/L	05/26/22 10:58	06/15/22 11:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.8		40 - 110					05/26/22 10:58	06/15/22 11:36	1
Y Carrier	81.5		40 - 110					05/26/22 10:58	06/15/22 11:36	1

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Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

Client Sample ID: MW-02

Date Collected: 05/23/22 11:53

Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-2

Matrix: Water

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	0.660		0.390	0.394	5.00	0.549	pCi/L		06/24/22 13:34	1

Client Sample ID: MW-03

Date Collected: 05/23/22 12:45

Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-3

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	<0.170	U	0.107	0.108	1.00	0.170	pCi/L	05/26/22 10:39	06/17/22 08:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.5		40 - 110					05/26/22 10:39	06/17/22 08:36	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	<0.534	U	0.341	0.343	1.00	0.534	pCi/L	05/26/22 10:58	06/15/22 11:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.5		40 - 110					05/26/22 10:58	06/15/22 11:36	1
Y Carrier	87.5		40 - 110					05/26/22 10:58	06/15/22 11:36	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	<0.534	U	0.357	0.360	5.00	0.534	pCi/L		06/24/22 13:34	1

Client Sample ID: MW-04

Date Collected: 05/23/22 13:57

Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-4

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	0.247		0.139	0.141	1.00	0.168	pCi/L	05/26/22 10:39	06/17/22 08:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		40 - 110					05/26/22 10:39	06/17/22 08:37	1

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

Client Sample ID: MW-04

Date Collected: 05/23/22 13:57

Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-4

Matrix: Water

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.508	U	0.319	0.321	1.00	0.508	pCi/L	05/26/22 10:58	06/15/22 11:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		40 - 110					05/26/22 10:58	06/15/22 11:36	1
Y Carrier	88.2		40 - 110					05/26/22 10:58	06/15/22 11:36	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	0.598		0.348	0.351	5.00	0.508	pCi/L		06/24/22 13:34	1

Client Sample ID: MW-16

Date Collected: 05/23/22 15:05

Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-5

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	<0.199	U	0.144	0.145	1.00	0.199	pCi/L	05/26/22 10:39	06/17/22 08:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.6		40 - 110					05/26/22 10:39	06/17/22 08:37	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	<0.531	U	0.356	0.359	1.00	0.531	pCi/L	05/26/22 10:58	06/15/22 11:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.6		40 - 110					05/26/22 10:58	06/15/22 11:36	1
Y Carrier	88.2		40 - 110					05/26/22 10:58	06/15/22 11:36	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	0.720		0.384	0.387	5.00	0.531	pCi/L		06/24/22 13:34	1

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

Client Sample ID: Duplicate

Lab Sample ID: 500-217068-6

Date Collected: 05/23/22 00:00

Matrix: Water

Date Received: 05/24/22 13:55

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	<0.200	U	0.141	0.142	1.00	0.200	pCi/L	05/26/22 10:39	06/17/22 08:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					05/26/22 10:39	06/17/22 08:37	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	<0.510	U	0.321	0.323	1.00	0.510	pCi/L	05/26/22 10:58	06/15/22 11:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					05/26/22 10:58	06/15/22 11:36	1
Y Carrier	88.6		40 - 110					05/26/22 10:58	06/15/22 11:36	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	0.554		0.351	0.353	5.00	0.510	pCi/L		06/24/22 13:34	1

Client Sample ID: MW-09

Lab Sample ID: 500-217068-7

Date Collected: 05/24/22 11:10

Matrix: Water

Date Received: 05/26/22 15:45

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	<0.143	U	0.0719	0.0719	1.00	0.143	pCi/L	05/31/22 09:45	06/22/22 09:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					05/31/22 09:45	06/22/22 09:36	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	<0.444	U	0.250	0.251	1.00	0.444	pCi/L	05/31/22 11:34	06/16/22 13:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					05/31/22 11:34	06/16/22 13:39	1
Y Carrier	91.2		40 - 110					05/31/22 11:34	06/16/22 13:39	1

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Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

Client Sample ID: MW-09
Date Collected: 05/24/22 11:10
Date Received: 05/26/22 15:45

Lab Sample ID: 500-217068-7
Matrix: Water

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	<0.444	U	0.260	0.261	5.00	0.444	pCi/L		06/24/22 13:34	1

Client Sample ID: MW-11
Date Collected: 05/24/22 09:10
Date Received: 05/26/22 15:45

Lab Sample ID: 500-217068-8
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	0.362		0.153	0.156	1.00	0.168	pCi/L	05/31/22 09:45	06/22/22 09:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		40 - 110					05/31/22 09:45	06/22/22 09:37	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	0.847		0.460	0.466	1.00	0.650	pCi/L	05/31/22 11:34	06/16/22 13:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		40 - 110					05/31/22 11:34	06/16/22 13:39	1
Y Carrier	91.2		40 - 110					05/31/22 11:34	06/16/22 13:39	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.21		0.485	0.491	5.00	0.650	pCi/L		06/24/22 13:34	1

Client Sample ID: MW-14
Date Collected: 05/24/22 10:08
Date Received: 05/26/22 15:45

Lab Sample ID: 500-217068-9
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	<0.157	U	0.100	0.101	1.00	0.157	pCi/L	05/31/22 09:45	06/22/22 12:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					05/31/22 09:45	06/22/22 12:10	1

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

Client Sample ID: MW-14
Date Collected: 05/24/22 10:08
Date Received: 05/26/22 15:45

Lab Sample ID: 500-217068-9
Matrix: Water

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.656	U	0.360	0.360	1.00	0.656	pCi/L	05/31/22 11:34	06/16/22 13:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					05/31/22 11:34	06/16/22 13:39	1
Y Carrier	89.3		40 - 110					05/31/22 11:34	06/16/22 13:39	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	<0.656	U	0.374	0.374	5.00	0.656	pCi/L		06/24/22 13:34	1



Definitions/Glossary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

Qualifiers

Rad

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

Glossary

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

QC Association Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

Rad

Prep Batch: 567407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217068-1	MW-01	Total/NA	Water	PrecSep-21	
500-217068-2	MW-02	Total/NA	Water	PrecSep-21	
500-217068-3	MW-03	Total/NA	Water	PrecSep-21	
500-217068-4	MW-04	Total/NA	Water	PrecSep-21	
500-217068-5	MW-16	Total/NA	Water	PrecSep-21	
500-217068-6	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-567407/16-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-567407/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-217068-1 DU	MW-01	Total/NA	Water	PrecSep-21	

Prep Batch: 567410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217068-1	MW-01	Total/NA	Water	PrecSep_0	
500-217068-2	MW-02	Total/NA	Water	PrecSep_0	
500-217068-3	MW-03	Total/NA	Water	PrecSep_0	
500-217068-4	MW-04	Total/NA	Water	PrecSep_0	
500-217068-5	MW-16	Total/NA	Water	PrecSep_0	
500-217068-6	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-567410/16-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-567410/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-217068-1 DU	MW-01	Total/NA	Water	PrecSep_0	

Prep Batch: 567685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217068-7	MW-09	Total/NA	Water	PrecSep-21	
500-217068-8	MW-11	Total/NA	Water	PrecSep-21	
500-217068-9	MW-14	Total/NA	Water	PrecSep-21	
MB 160-567685/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-567685/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 567697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217068-7	MW-09	Total/NA	Water	PrecSep_0	
500-217068-8	MW-11	Total/NA	Water	PrecSep_0	
500-217068-9	MW-14	Total/NA	Water	PrecSep_0	
MB 160-567697/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-567697/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-567407/16-A
Matrix: Water
Analysis Batch: 570475

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 567407

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	<0.157	U	0.0827	0.0828	1.00	0.157	pCi/L	05/26/22 10:39	06/17/22 08:39	1
Carrier	MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	MB Qualifier	40 - 110					05/26/22 10:39	06/17/22 08:39	1
	99.8									

Lab Sample ID: LCS 160-567407/1-A
Matrix: Water
Analysis Batch: 570475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 567407

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits		
				Uncert. (2σ+/-)							
Radium-226	11.3	9.101		1.07	1.00	0.173	pCi/L	80	75 - 125		
Carrier	LCS	LCS									
Ba Carrier	%Yield	Qualifier	Limits								
	98.8		40 - 110								

Lab Sample ID: 500-217068-1 DU
Matrix: Water
Analysis Batch: 570475

Client Sample ID: MW-01
Prep Type: Total/NA
Prep Batch: 567407

Analyte	Sample		DU	DU	Total	RL	MDC	Unit	RER	RER Limit	
	Result	Sample Qual	Result	Qual	Uncert. (2σ+/-)						
Radium-226	<0.256	U	<0.231	U	0.124	1.00	0.231	pCi/L	0.42	1	
Carrier	DU	DU									
Ba Carrier	%Yield	Qualifier	Limits								
	90.3		40 - 110								

Lab Sample ID: MB 160-567685/22-A
Matrix: Water
Analysis Batch: 571083

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 567685

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	<0.0979	U	0.0593	0.0595	1.00	0.0979	pCi/L	05/31/22 09:45	06/22/22 12:10	1
Carrier	MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	MB Qualifier	40 - 110					05/31/22 09:45	06/22/22 12:10	1
	95.8									

Lab Sample ID: LCS 160-567685/1-A
Matrix: Water
Analysis Batch: 571083

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 567685

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	9.569		1.03	1.00	0.134	pCi/L	84	75 - 125

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QC Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

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

Lab Sample ID: LCS 160-567685/1-A
Matrix: Water
Analysis Batch: 571083

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 567685

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	99.8	U	40 - 110

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-567410/16-A
Matrix: Water
Analysis Batch: 570137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 567410

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.423	U	0.247	0.247	1.00	0.423	pCi/L	05/26/22 10:58	06/15/22 11:37	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.8		40 - 110					05/26/22 10:58	06/15/22 11:37	1
Y Carrier	90.8		40 - 110					05/26/22 10:58	06/15/22 11:37	1

Lab Sample ID: LCS 160-567410/1-A
Matrix: Water
Analysis Batch: 570137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 567410

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	8.53	7.951		1.07	1.00	0.462	pCi/L	93	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	98.8		40 - 110						
Y Carrier	92.7		40 - 110						

Lab Sample ID: 500-217068-1 DU
Matrix: Water
Analysis Batch: 570137

Client Sample ID: MW-01
Prep Type: Total/NA
Prep Batch: 567410

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	<0.434	U	<0.505	U	0.314	1.00	0.505	pCi/L	0.65	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	90.3		40 - 110							
Y Carrier	85.6		40 - 110							

Lab Sample ID: MB 160-567697/22-A
Matrix: Water
Analysis Batch: 570293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 567697

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.381	U	0.185	0.185	1.00	0.381	pCi/L	05/31/22 11:34	06/16/22 13:39	1

Eurofins Chicago

QC Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

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

Lab Sample ID: MB 160-567697/22-A
Matrix: Water
Analysis Batch: 570293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 567697

Carrier	MB MB		Limits
	%Yield	Qualifier	
Ba Carrier	95.8		40 - 110
Y Carrier	92.0		40 - 110

Prepared	Analyzed	Dil Fac
05/31/22 11:34	06/16/22 13:39	1
05/31/22 11:34	06/16/22 13:39	1

Lab Sample ID: LCS 160-567697/1-A
Matrix: Water
Analysis Batch: 570309

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 567697

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec
									Limits
Radium-228	8.53	8.215		1.13	1.00	0.481	pCi/L	96	75 - 125

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	99.8		40 - 110
Y Carrier	86.0		40 - 110

Chain of Custody Record

Client Information		Sampler: <i>Mitchel Dolan + Kaelyn Spalte</i>		Lab PM: Mockler Diana J		Carrier Tracking No(s)		COC No: 500-91227-40689 1	
Client Contact: Mitchel Dolan		Phone: <i>262-622-1143</i>		E Mail: Diana.Mockler@Eurofinset.com		State of Origin: <i>IL</i>		Page: Page 1 of 1	
Company: KPRG and Associates Inc		PWSID		Analysis Request				Job #: <i>500 217068</i>	
Address: 14665 West Lisbon Road Suite 1A		Due Date Requested		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 6010C - Lithium 6020A - 13 elements 7470A - Mercury 2540C - TDS 4500FC - Fluoride SM00CLE - Chloride SM4500SO4 - Sulfate 903 - Rad 226 904 - Rad 228 Rad Combined		Total Number of containers 500-217068 COC		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:	
City: Brookfield		TAT Requested (days)							
State/Zip: WI 53005		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No							
Phone: 262-781-0475(Tel)		PO #: 4502012555							
Email: mitcheld@kprginc.com		WO #							
Project Name: Quarterly Waukegan CCR		Project #: 50011597							
Site: Illinois		SSOW#							
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	
								Preservation Code	
								D N N N N D D D X X X X X X X X	
1 <i>MW-01</i>		<i>5/23/22</i>		<i>1059</i>		<i>G</i>		<i>W</i>	
2 <i>MW-02</i>		<i>5/23/22</i>		<i>1153</i>		<i>G</i>		<i>W</i>	
3 <i>MW-03</i>		<i>5/23/22</i>		<i>1245</i>		<i>G</i>		<i>W</i>	
4 <i>MW-04</i>		<i>5/23/22</i>		<i>1357</i>		<i>G</i>		<i>W</i>	
5 <i>MW-16</i>		<i>5/23/22</i>		<i>1505</i>		<i>G</i>		<i>W</i>	
6 <i>Duplicate</i>		<i>5/23/22</i>		<i>-</i>		<i>G</i>		<i>W</i>	
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested I II III IV Other (specify)					Special Instructions/QC Requirements				
Empty Kit Relinquished by		Date		Time		Method of Shipment			
Relinquished by: <i>MPO</i>		Date/Time: <i>5/23/22 / 1700</i>		Company: <i>KPRG</i>		Received by: <i>FEDEX</i>		Date/Time: <i>5/23/22 / 1700</i>	
Relinquished by:		Date/Time:		Company:		Received by: <i>Thin Scott</i>		Date/Time: <i>1355</i>	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: <i>4.0 -> 3.4, 0.4 -> 0.1</i>					



Eurofins TestAmerica, Chicago

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

Chain of Custody Record

eurofins Environmental Testing America

Client Information		Sampler: <i>Kaelyn Sperle & Mitchell Dolan</i>		Lab PM: Mockler Diana J		Carrier Tracking No(s)		COC No: 500-91227-40689 1																															
Client Contact: Mitchel Dolan		Phone: <i>262-781-0475</i>		E-Mail: Diana Mockler@Eurofinset.com		State of Origin: <i>IL</i>		Page: Page 1 of 1																															
Company: KPRG and Associates Inc		PWSID		Analysis Requested						Job #: <i>500-217088</i>																													
Address: 14665 West Lisbon Road Suite 1A		Due Date Requested		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		6010C - Lithium 6020A - 13 elements 7470A - Mercury		2540C - TDS		4500FC - Fluoride		SM00CLE - Chloride		SM4500SO4 - Sulfate		903 - Rad 226		904 - Rad 228		Rad Combined		Total Number of Containers		Preservation Codes													
City: Brookfield		TAT Requested (days)																								A HCL M Hexane				B NaOH N None									
State Zip: WI 53005		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No																								C Zn Acetate O AsNaO2				D Nitric Acid P Na2O4S									
Phone: 262-781-0475(Tel)		PO #: 4502012555																								E NaHSO4 Q Na2SO3				F MeOH R Na2S2O3									
Email: mitcheld@kprginc.com		WO #		G Amchlor S H2SO4				H Ascorbic Acid T TSP Dodecahydrate				I Ice U Acetone																											
Project Name: Quarterly Waukegan CCR		Project #: 50011597		J DI Water V MCAA				K EDTA W pH 4-5				L EDA Z other (specify)																											
Site: Illinois		SSOW#		Other:																																			
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		6010C - Lithium		6020A - 13 elements		7470A - Mercury		2540C - TDS		4500FC - Fluoride		SM00CLE - Chloride		SM4500SO4 - Sulfate		903 - Rad 226		904 - Rad 228		Rad Combined		Total Number of Containers		Special Instructions/Note			
						Preservation Code																												*Metals List Sb,As,Ba,Be,B,Cd,Ca,Cr,Co,Pb,Mo,Se,Tl					
<i>MW-09</i>		<i>5/24/22</i>		<i>1110</i>		<i>G W</i>		<i>W</i>		<i>N N</i>		<i>X X</i>		<i>X X</i>		<i>X X</i>		<i>X X</i>		<i>X X</i>		<i>X X</i>		<i>X X</i>		<i>X X</i>		<i>X X</i>		<i>X X</i>									
<i>MW-11</i>		<i>5/24/22</i>		<i>0910</i>		<i>G W</i>		<i>W</i>		<i>N N</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>									
<i>MW-14</i>		<i>5/24/22</i>		<i>1008</i>		<i>G W</i>		<i>W</i>		<i>N N</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>		<i>↓ ↓</i>									
Possible Hazard Identification										Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)																													
<input type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological										<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																													
Deliverable Requested I II III IV Other (specify)										Special Instructions/QC Requirements																													
Empty Kit Relinquished by					Date					Time					Method of Shipment																								
Relinquished by: <i>Kaelyn Sperle</i>					Date/Time: <i>5/24/22/1700</i>					Company: <i>KPRG</i>					Received by: <i>FedEx</i>					Date/Time: <i>5/24/22/1700</i>					Company: <i>FedEx</i>														
Relinquished by:					Date/Time:					Company:					Received by: <i>Jim Smith</i>					Date/Time: <i>5/26/22 1545</i>					Company: <i>EBIA</i>														
Relinquished by:					Date/Time:					Company:					Received by:					Date/Time:					Company:														
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No					Custody Seal No					Cooler Temperature(s) °C and Other Remarks: <i>9.0 → 8.6</i>																													

5009

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Client Information (Sub Contract Lab)		Sampler: Lab PM: Mockler, Diana J		Carrier Tracking No(s):		COC No: 500-161079.1	
Client Contact: Shipping/Receiving		Phone: Diana.Mockler@eurofins.com		State of Origin: Illinois		Page: Page 1 of 1	
TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #:		500-217068-2	
Address: 13715 Rider Trail North, Earth City, MO, 63045		Due Date Requested: 6/23/2022		Analysis Requested		Preservation Codes:	
City: Earth City		TAT Requested (days):		903.0/PreSep_21 Standard Target List		A - HCL	
State, Zip: MO, 63045		PO #:		904.0/PreSep_0 Standard Target List		B - NaOH	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		WO #:		Perform MS/MSD (Yes or No)		C - Zn Acetate	
Email:		Project #: 50011597		Field Filtered Sample (Yes or No)		D - Nitric Acid	
Project Name: Waukegan CCR		SSOW#:		R226R228_GFPc		E - NaHSO4	
Site: NRG Midwest Generation Waukegan		Sample Date		Preservation Code:		F - MeOH	
Sample Identification - Client ID (Lab ID)		Sample Time		Matrix (W=Water, S=Solid, O=Water/Oil, BT=Tissue, A=Air)		G - Amchlor	
MW-01 (500-217068-1)	5/23/22	10:59 Central	Water	X	X	H - Ascorbic Acid	
MW-02 (500-217068-2)	5/23/22	11:53 Central	Water	X	X	I - Ice	
MW-03 (500-217068-3)	5/23/22	12:45 Central	Water	X	X	J - DI Water	
MW-04 (500-217068-4)	5/23/22	13:57 Central	Water	X	X	K - EDTA	
MW-16 (500-217068-5)	5/23/22	15:05 Central	Water	X	X	L - EDA	
Duplicate (500-217068-6)	5/23/22	Central	Water	X	X	Other:	
				Total Number of Containers		Special Instructions/Note:	
				3		Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;	
				3		Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;	
				3		Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;	
				3		Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;	
				3		Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume;	
				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/test/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Chicago attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago.

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) _____
 Primary Deliverable Rank: 2
 Empty Kit Relinquished by: _____
 Relinquished by: _____
 Relinquished by: _____
 Relinquished by: _____
 Custody Seals Intact: _____
 Custody Seal No.: _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements: _____
 Method of Shipment: _____
 Received by: _____ Date: _____
 Received by: _____ Date: _____
 Received by: _____ Date: _____
 Cooler Temperature(s) °C and Other Remarks: _____



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-217068-2

Login Number: 217068

List Source: Eurofins 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.	False	
Cooler Temperature is recorded.	True	3.4,-0.1 Samples not frozen8.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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: KPRG and Associates, Inc.

Job Number: 500-217068-2

Login Number: 217068

List Number: 2

Creator: Booker, Autumn R

List Source: Eurofins St. Louis

List Creation: 05/25/22 03:27 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: KPRG and Associates, Inc.

Job Number: 500-217068-2

Login Number: 217068

List Number: 3

Creator: Booker, Autumn R

List Source: Eurofins St. Louis

List Creation: 05/28/22 09:39 AM

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



Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

Client Sample ID: MW-01

Date Collected: 05/23/22 10:59

Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			567407	05/26/22 10:39	MS	TAL SL
Total/NA	Analysis	903.0		1	570475	06/17/22 08:34	CLP	TAL SL
Total/NA	Prep	PrecSep_0			567410	05/26/22 10:58	MS	TAL SL
Total/NA	Analysis	904.0		1	570137	06/15/22 11:35	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	571469	06/24/22 13:34	SCB	TAL SL

Client Sample ID: MW-02

Date Collected: 05/23/22 11:53

Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			567407	05/26/22 10:39	MS	TAL SL
Total/NA	Analysis	903.0		1	570475	06/17/22 08:35	CLP	TAL SL
Total/NA	Prep	PrecSep_0			567410	05/26/22 10:58	MS	TAL SL
Total/NA	Analysis	904.0		1	570137	06/15/22 11:36	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	571469	06/24/22 13:34	SCB	TAL SL

Client Sample ID: MW-03

Date Collected: 05/23/22 12:45

Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			567407	05/26/22 10:39	MS	TAL SL
Total/NA	Analysis	903.0		1	570475	06/17/22 08:36	CLP	TAL SL
Total/NA	Prep	PrecSep_0			567410	05/26/22 10:58	MS	TAL SL
Total/NA	Analysis	904.0		1	570137	06/15/22 11:36	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	571469	06/24/22 13:34	SCB	TAL SL

Client Sample ID: MW-04

Date Collected: 05/23/22 13:57

Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			567407	05/26/22 10:39	MS	TAL SL
Total/NA	Analysis	903.0		1	570475	06/17/22 08:37	CLP	TAL SL
Total/NA	Prep	PrecSep_0			567410	05/26/22 10:58	MS	TAL SL
Total/NA	Analysis	904.0		1	570137	06/15/22 11:36	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	571469	06/24/22 13:34	SCB	TAL SL

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

Client Sample ID: MW-16
Date Collected: 05/23/22 15:05
Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			567407	05/26/22 10:39	MS	TAL SL
Total/NA	Analysis	903.0		1	570475	06/17/22 08:37	CLP	TAL SL
Total/NA	Prep	PrecSep_0			567410	05/26/22 10:58	MS	TAL SL
Total/NA	Analysis	904.0		1	570137	06/15/22 11:36	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	571469	06/24/22 13:34	SCB	TAL SL

Client Sample ID: Duplicate
Date Collected: 05/23/22 00:00
Date Received: 05/24/22 13:55

Lab Sample ID: 500-217068-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			567407	05/26/22 10:39	MS	TAL SL
Total/NA	Analysis	903.0		1	570475	06/17/22 08:37	CLP	TAL SL
Total/NA	Prep	PrecSep_0			567410	05/26/22 10:58	MS	TAL SL
Total/NA	Analysis	904.0		1	570137	06/15/22 11:36	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	571469	06/24/22 13:34	SCB	TAL SL

Client Sample ID: MW-09
Date Collected: 05/24/22 11:10
Date Received: 05/26/22 15:45

Lab Sample ID: 500-217068-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			567685	05/31/22 09:45	MS	TAL SL
Total/NA	Analysis	903.0		1	571087	06/22/22 09:36	FLC	TAL SL
Total/NA	Prep	PrecSep_0			567697	05/31/22 11:34	MS	TAL SL
Total/NA	Analysis	904.0		1	570293	06/16/22 13:39	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	571467	06/24/22 13:34	SCB	TAL SL

Client Sample ID: MW-11
Date Collected: 05/24/22 09:10
Date Received: 05/26/22 15:45

Lab Sample ID: 500-217068-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			567685	05/31/22 09:45	MS	TAL SL
Total/NA	Analysis	903.0		1	571087	06/22/22 09:37	FLC	TAL SL
Total/NA	Prep	PrecSep_0			567697	05/31/22 11:34	MS	TAL SL
Total/NA	Analysis	904.0		1	570293	06/16/22 13:39	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	571467	06/24/22 13:34	SCB	TAL SL

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

Client Sample ID: MW-14

Date Collected: 05/24/22 10:08

Date Received: 05/26/22 15:45

Lab Sample ID: 500-217068-9

Matrix: Water

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	PrecSep-21			567685	05/31/22 09:45	MS	TAL SL
Total/NA	Analysis	903.0		1	571083	06/22/22 12:10	FLC	TAL SL
Total/NA	Prep	PrecSep_0			567697	05/31/22 11:34	MS	TAL SL
Total/NA	Analysis	904.0		1	570293	06/16/22 13:39	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	571467	06/24/22 13:34	SCB	TAL SL

Laboratory References:

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

Accreditation/Certification Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

Laboratory: Eurofins St. Louis

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	200023	11-30-22

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Tracer/Carrier Summary

Client: KPRG and Associates, Inc.
Project/Site: Waukegan CCR Q2

Job ID: 500-217068-2

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)
500-217068-1	MW-01	98.0
500-217068-1 DU	MW-01	90.3
500-217068-2	MW-02	86.8
500-217068-3	MW-03	90.5
500-217068-4	MW-04	90.8
500-217068-5	MW-16	79.6
500-217068-6	Duplicate	92.0
500-217068-7	MW-09	92.0
500-217068-8	MW-11	91.0
500-217068-9	MW-14	93.5
LCS 160-567407/1-A	Lab Control Sample	98.8
LCS 160-567685/1-A	Lab Control Sample	99.8
MB 160-567407/16-A	Method Blank	99.8
MB 160-567685/22-A	Method Blank	95.8

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (40-110)	Y (40-110)
500-217068-1	MW-01	98.0	85.2
500-217068-1 DU	MW-01	90.3	85.6
500-217068-2	MW-02	86.8	81.5
500-217068-3	MW-03	90.5	87.5
500-217068-4	MW-04	90.8	88.2
500-217068-5	MW-16	79.6	88.2
500-217068-6	Duplicate	92.0	88.6
500-217068-7	MW-09	92.0	91.2
500-217068-8	MW-11	91.0	91.2
500-217068-9	MW-14	93.5	89.3
LCS 160-567410/1-A	Lab Control Sample	98.8	92.7
LCS 160-567697/1-A	Lab Control Sample	99.8	86.0
MB 160-567410/16-A	Method Blank	99.8	90.8
MB 160-567697/22-A	Method Blank	95.8	92.0

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

PROJECT NAME	NRG - WAUKEGAN STATION (12313.2)		DATE	5/23/22
Sample Name	MW-01	Start Time	1046	
Condition of Well	Good			
Water Level	21.25	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow	Purge Characteristics	Clear	
Volume Removed	5 gals gals	W L at Sample Time	21.26	
Method of Sample	Low-Flow	Sample Characteristics	Clear	
Sample Analysis	Permit + CCR	Sample Time	1059	
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)
1046	21.25	7.35	13.7	.782	8.20	205.0	3.90
1049	-	7.35	13.6	.862	3.33	204.9	3.24
1052	-	7.55	13.6	.872	1.01	200.1	2.98
1055	-	7.68	13.5	.856	0.60	192.8	2.84
1058	21.26	7.77	13.5	.846	0.44	186.0	2.92

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates



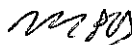
PROJECT NAME	NRG - WAUKEGAN STATION (12313.2)		DATE	5/23/22
Sample Name	Mw-02	Start Time	1140	
Condition of Well	good			
Water Level	21.11	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow	Purge Characteristics	clear	
Volume Removed	6 Quarts	W L at Sample Time	21.07	
Method of Sample	Low-Flow	Sample Characteristics	Clear	
Sample Analysis	permit & CCR	Sample Time	1153	
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)
1140	21.11	7.49	13.0	.825	8.52	186.0	6.15
1143	-	7.79	13.1	.659	2.23	179.3	14.67
1146	-	8.11	13.0	.646	0.97	170.2	12.62
1149	-	8.19	13.0	.641	0.67	162.0	23.62
1152	21.07	8.12	13.0	.658	0.51 0.51	155.8	30.54

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates



PROJECT NAME	NRG - WAUKEGAN STATION (12313.2)		DATE	5/23/22
Sample Name	MW-Ø3	Start Time	1232	
Condition of Well	good			
Water Level	21.18	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow	Purge Characteristics	Clear	
Volume Removed	4.5 Qts	W L at Sample Time	21.29	
Method of Sample	Low-Flow	Sample Characteristics	Clear	
Sample Analysis	permit & CCR	Sample Time	1245	
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)
1232	21.18	8.00	14.2	.800	9.73	176.0	5.40
1235	-	7.65	14.3	.673	4.97	178.6	6.63
1238	-	8.39	14.5	.607	1.19	164.5	11.58
1241	-	8.70	14.4	.619	0.77	156.1	5.14
1244	21.29	8.72	14.4	.636	0.61	152.0	4.11

SAMPLING NOTES: permit duplicate

Sampler Name and Company:

KPRG and Associates

MAD

PROJECT NAME	NRG - WAUKEGAN STATION (12313.2)		DATE	5/23/22
Sample Name	MW-Ø4	Start Time	1344	
Condition of Well	good			
Water Level	20.92	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow	Purge Characteristics	SL Cloudy	
Volume Removed	6 Qts.	W L at Sample Time	20.90	
Method of Sample	Low-Flow	Sample Characteristics	Clear	
Sample Analysis	permit & CCR	Sample Time	1357	
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)
1344	20.92	8.03	11.9	.933	9.30	185.8	3.93
1347	-	7.64	11.5	.608	3.93	179.1	31.90
1350	-	7.95	11.3	.577	1.01	165.8	76.84
1353	-	8.05	11.3	.582	0.59	152.7	25.09
1356	20.90	8.05	11.2	.596	0.47	143.1	28.94

SAMPLING NOTES: CCR Duplicate

Sampler Name and Company:

KPRG and Associates

mp

PROJECT NAME	NRG - WAUKEGAN STATION (12313.2)		DATE	5/24/22
Sample Name	MW-09	Start Time	1056 1056	
Condition of Well	good			
Water Level	10.45	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow	Purge Characteristics	sl. cloudy sl. cloudy	
Volume Removed	2 gts	W L at Sample Time	10.45	
Method of Sample	Low-Flow	Sample Characteristics	sl. cloudy, brown to clear	
Sample Analysis	CCR & permit	Sample Time	1110	
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)
1056 1056	10.45	7.30	11.5 11.5	1.665	6.52	143.8	40.16
1059	-	7.31	11.4	1.567	2.45	146.0	166.41
1102	-	7.20	11.2	1.558	1.11	146.0	207.13
1105	-	7.16	11.2	1.562	0.71	145.0	137.66
1108	10.45	7.15	11.2	1.564	0.58	143.8	170.87

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

MAD

PROJECT NAME	NRG - WAUKEGAN STATION (12313.2)		DATE	5/24/22
Sample Name	MW-11	Start Time	0854	
Condition of Well	Good			
Water Level	6.45	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow	Purge Characteristics	Clear	
Volume Removed	2 QTS	W L at Sample Time	6.40	
Method of Sample	Low-Flow	Sample Characteristics	Clear	
Sample Analysis	PermT + CCP	Sample Time	0910	
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)
0856	6.45	6.75	10.4	1.445	6.59	200.3	15.57
0859	-	6.73	10.2	1.447	1.99	157.3	4.60
0902	-	6.75	10.1	1.446	0.99	77.3	2.77
0905	-	6.77	10.1	1.445	0.68	21.4	2.37
0908	6.40	6.78	10.1	1.445	0.54	-9.0	2.18

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

MJD

PROJECT NAME	NRG - WAUKEGAN STATION (12313.2)		DATE	5/24/22
Sample Name	MW-14	Start Time	0955	
Condition of Well	good			
Water Level	5.19	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow	Purge Characteristics	clear	
Volume Removed	2 gts	W L at Sample Time	5.19	
Method of Sample	Low-Flow	Sample Characteristics	Clear	
Sample Analysis	CLR & permit	Sample Time	1008	
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)
0955	5.19	7.60	10.3	1.115	9.56	119.8	29.50
0958	-	7.34	9.8	.917	3.70	132.9	85.27
1001	-	7.19	9.6	.913	1.96	134.4	48.70
1004	-	7.13	9.6	.921	1.45	132.9	27.35
1007	5.19	7.11	9.6	.928	1.23	129.1	43.52

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

MPT

PROJECT NAME	NRG - WAUKEGAN STATION (12313.2)		DATE	5/23/22
Sample Name	MW-16	Start Time	1452	
Condition of Well	good			
Water Level	25.85	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow	Purge Characteristics	Clear	
Volume Removed	1.5 gts	W L at Sample Time	26.88	
Method of Sample	Low-Flow	Sample Characteristics	Clear	
Sample Analysis	CCR	Sample Time	1505	
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)
1452	25.85	8.03	15.6	1.014	10.03	165.0	7.00
1455	-	7.02	13.5	1.604	3.66	188.3	45.33
1458	-	6.98	13.6	1.621	2.34	189.1	22.86
1501	-	6.97	13.7	1.603	2.08	187.8	21.90
1504	26.88	6.97	13.6	1.589	1.90	186.3	11.75

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

