

## **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 2<sup>nd</sup> 2024 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, Walkgen Station, Walkgen, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228 Combined	Selenium	Thallium	
MW-09 sp gradient	11/4/2015	13	210	450	0.14	6.60	370	1700	< 0.003	< 0.001	0.015	^A < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.081	< 0.0002	0.360	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	0.004	< 0.0002	0.51	< 0.36	0.025	< 0.002		
	5/2/2016	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	180	270	0.21	7.13	190	1100	< 0.004	0.004	0.024	< 0.001	0.0011	0.046	0.0027	0.049	< 0.0002	0.063	0.482	0.059	< 0.002	< 0.002	
	1/28/2017	15	200	270	0.18	7.01	270	1300	< 0.003	0.004	0.004	< 0.001	0.00052	< 0.005	< 0.001	0.0005	0.077	< 0.0002	0.24	< 0.72	0.077	< 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	17	160	67	0.29	8.15	420	970	< 0.003	< 0.001	0.0094	^A < 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	^A < 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	290	0.1	6.95	490	1000	< 0.003	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	< 0.003	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	12	160	17	0.16	8.04	300	750	< 0.003	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	< 0.003	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	< 0.003	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	^A < 0.001	0.0015	0.066	< 0.0002	0.12	< 0.457	0.071	^A < 0.002	
	11/4/2021	10	150	160	0.24	7.07	180	980	< 0.003	0.0026	0.074	^A < 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	^A < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.054	< 0.0002	0.18	< 0.444	< 0.002	< 0.002		
8/23/2022	4.1	170	170	0.22	7.14	290	1100	< 0.003	0.0012	0.046	^A < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.048	< 0.0002	0.21	< 0.487	0.034	< 0.002		
11/7/2022	6.4	160	200	0.51	6.98	220	1100	< 0.003	0.0083	0.14	^A < 0.001	< 0.0005	< 0.005	0.0013	0.034	0.057	< 0.0002	0.088	2.58	< 0.0025	< 0.002		
12/21/2022 (R)	NS	NS	NS	0.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
2/13/2023	B 2.8	280	220	0.12	6.97	490	1500	< 0.0030	0.0011	0.074	< 0.0010	< 0.0050	< 0.0050	< 0.0010	< 0.0050	0.062	< 0.00020	0.46	1.01	0.029	< 0.0020		
5/9/2023	4.7	140	220	0.23	7.08	200	890	< 0.0030	0.0011	0.021	^A < 0.0010	< 0.0050	< 0.0050	< 0.0010	< 0.0050	0.045	< 0.00020	0.15	< 0.557	< 0.0025	< 0.0020		
8/8/2023	20	270	380	0.23	6.98	510	1800	< 0.0030	0.0021	0.11	< 0.0010	< 0.0050	< 0.0050	< 0.0010	< 0.0050	0.062	< 0.00020	0.35	0.754	0.022	< 0.0020		
11/28/2023	2.6	96	170	0.33	7.15	130	750	< 0.0030	0.0071	0.061	^A < 0.0010	< 0.0050	< 0.0050	< 0.0010	< 0.0050	0.053	< 0.00020	0.049	0.652	< 0.0025	< 0.0020		
2/6/2024	24	240	150	0.18	6.88	460	1300	^A < 0.0030	0.0035	0.12	< 0.0010	< 0.0050	< 0.0050	< 0.0010	< 0.0050	< 0.20	< 0.00020	0.32	1.09	< 0.0070	< 0.0020		
5/21/2024	2.3	120	180	0.37	7.12	130	860	< 0.0030	0.027	0.13	< 0.0010	< 0.0050	< 0.0050	< 0.0010	< 0.0050	0.047	< 0.00020	0.074	0.768	< 0.0025	< 0.0020		
11/5/2015	5.2	140	240	0.13	6.51	190	1100	< 0.003	0.77	0.039	^A < 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	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	< 0.0005	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	< 0.001	< 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	^A < 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	2.6	140	190	0.14	7.33	130	1100	< 0.003	0.69	0.049	< 0.001	< 0.0005	0.006	< 0.001	< 0.0005	0.041	< 0.0002	< 0.005	0.899	< 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	< 0.0005	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	^A < 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	< 0.003	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	< 0.003	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	0.19	7.51	NA	860	< 0.003	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	< 0.003	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	< 0.003	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	< 0.0												

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

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228 Combined	Selenium	Thallium	
MW-02 non-potable	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	1.3	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	61	69	0.2	7.53	250	400	< 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	0.599	< 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	0.052	< 0.002	
	11/27/2017	3.4	69	67	0.62	7.34	290	570	< 0.003	0.011	0.02	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.048	0.442	0.025	< 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	0.5	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	0.56	0.035	< 0.002	
	8/22/2022	3.3	84	33	0.3	7.59	220	650	< 0.003	0.011	0.024	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.029	< 0.4	< 0.0025	< 0.002	
	11/7/2022	3.5	120	36	0.3	7.40	0.013	700	< 0.003	0.013	0.033	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.028	1.47	< 0.0025	< 0.002	
	2/13/2023	3.8	83	45	0.34	7.90	180	560	< 0.0030	0.0086	0.029	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	< 0.010	< 0.00020	0.022	0.64	0.042	< 0.0020	
	5/8/2023	3.1	62	47	0.39	8.00	210	440	< 0.0030	0.0090	0.027	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	< 0.010	< 0.00020	0.020	0.659	0.038	< 0.0020	
	8/7/2023	< 0.1	68	51	0.40	8.17	210	510	< 0.0030	0.0089	0.022	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	< 0.010	< 0.00020	0.022	0.588	< 0.0025	< 0.0020	
	11/28/2023	3.4	61	67	0.36	7.58	150	480	< 0.0030	0.0083	0.021	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	< 0.010	< 0.00020	0.017	0.557	0.054	< 0.0020	
	2/5/2024	3.5	67	78	0.49	8.16	170	530	< 0.0030	0.0086	0.024	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	< 0.010	< 0.00020	0.014	0.981	0.040	< 0.0020	
5/20/2024	5.1	170	70	0.24	7.02	360	980	< 0.0030	0.0087	0.057	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	< 0.010	< 0.00020	0.017	0.628	0.015	< 0.0020		
MW-03 non-potable	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	0.043	< 0.002	
	5/4/2016	2.4	42	74	0.28	7.25	170	470	< 0.003	0.007	0.014	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.058	0.48	0.058	< 0.002	
	8/24/2016	2.0	70	59	0.3	9.13	0.010	430	< 0.003	0.010	0.009	< 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	0.007	0.011	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.010	< 0.0002	0.048	0.28	0.058	< 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	0.081	< 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	7.54	190	480	NA	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	NA
	5/14/2019	4.2	86	17	0.59	7.21	270	640	< 0.003	0.0059	0.022	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.010	< 0.0002	0.053	0.657	0.061	< 0.002	
	11/19/2019	3.4	130	15	0.25	7.47	300	740	NA	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	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	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	0.065	< 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	< 0.0002	0.031	0.045	< 0.0025	< 0.002	
	11/2/2021	3.2	120	40	0.18	7.05	250	6															

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
	8/23/2022	34.9
	11/7/2022	195.02
	2/14/2023	20.46
	5/9/2023	9.34
	8/8/2023	18.85
	11/28/2023	27.24
2/6/2024	147.43	
5/21/2024	105.62	
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
	8/23/2022	3.17
	11/8/2022	7771.57*
	2/14/2023	5.12
	5/9/2023	16.30
	8/8/2023	11.59
	11/28/2023	7.01
2/6/2024	5.32	
5/21/2024	6.08	
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
	8/23/2022	24.76
	11/8/2022	311.78
	2/14/2023	660.17
	5/9/2023	16.57
	8/8/2023	10.85
	11/28/2023	220.56
2/6/2024	80.17	
5/21/2024	38.51	

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

Well	Date	Turbidity (NTU)
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
	8/22/2022	1.31
	11/7/2022	41.21
	2/13/2023	2.90
	5/8/2023	3.21
	8/7/2023	3.15
	11/27/2023	3.74
2/5/2024	5.07	
5/20/2024	4.72	
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
	8/22/2022	25.43
	11/7/2022	23.82
	2/13/2023	5.25
	5/8/2023	14.43
	8/7/2023	2.32
	11/28/2023	4.56
2/5/2024	5.15	
5/20/2024	8.91	
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
	8/22/2022	1.91
	11/7/2022	2.27
	2/13/2023	2.86
	5/8/2023	3.61
	8/7/2023	2.68
	11/27/2023	3.57
2/5/2024	5.03	
5/20/2024	6.09	

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

Well	Date	Turbidity (NTU)
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
	8/22/2022	2.57
	11/7/2022	41.15
	2/13/2023	3.76
	5/9/2023	15.03
	8/8/2023	2.54
	11/27/2023	4.22
2/5/2024	3.73	
5/21/2024	5.67	
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
	8/22/2022	3.54
	11/7/2022	42.55
	2/13/2023	32.31
	5/9/2023	2.95
	8/8/2023	2.81
	11/28/2023	45.54
2/6/2024	11.95	
5/21/2024	9.87	

\* - MW-11 November 2022 turbidity is a field recording error.

# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 6/10/2024 11:44:28 AM

## JOB DESCRIPTION

Waukegan CCR

## JOB NUMBER

500-250785-1

# Eurofins Chicago

## Job Notes

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## Authorization



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





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# Case Narrative

Client: KPRG and Associates, Inc.  
Project: Waukegan CCR

Job ID: 500-250785-1

**Job ID: 500-250785-1**

**Eurofins Chicago**

## Job Narrative 500-250785-1

### Receipt

The samples were received on 5/21/2024 9:50 AM and 5/22/2024 9:55 AM. 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 0.9°C, 2.4°C and 5.9°C.

### Metals

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

### General Chemistry

Method SM4500\_Cl\_E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 500-769736 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method SM4500\_SO4\_E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 500-769954 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Eurofins Chicago

# Method Summary

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

Job ID: 500-250785-1

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

#### Protocol References:

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

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

#### Laboratory References:

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

# Sample Summary

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

Job ID: 500-250785-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-250785-1	MW-01	Water	05/20/24 10:48	05/21/24 09:50
500-250785-2	MW-02	Water	05/20/24 12:14	05/21/24 09:50
500-250785-3	MW-03	Water	05/20/24 13:59	05/21/24 09:50
500-250785-4	Duplicate	Water	05/20/24 00:00	05/21/24 09:50
500-250785-5	MW-04	Water	05/21/24 08:52	05/22/24 09:55
500-250785-6	MW-09	Water	05/21/24 10:14	05/22/24 09:55
500-250785-7	MW-11	Water	05/21/24 13:11	05/22/24 09:55
500-250785-8	MW-14	Water	05/21/24 14:35	05/22/24 09:55
500-250785-9	MW-16	Water	05/21/24 11:54	05/22/24 09:55

- 1
- 2
- 3
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- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Client Sample Results

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

Job ID: 500-250785-1

**Client Sample ID: MW-01**  
Date Collected: 05/20/24 10:48  
Date Received: 05/21/24 09:50

**Lab Sample ID: 500-250785-1**  
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/04/24 09:00	06/05/24 11:31	1
<b>Arsenic</b>	<b>0.017</b>		0.0010		mg/L		06/04/24 09:00	06/05/24 11:31	1
<b>Barium</b>	<b>0.068</b>		0.0025		mg/L		06/04/24 09:00	06/05/24 11:31	1
Beryllium	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 11:31	1
<b>Boron</b>	<b>2.3</b>		0.050		mg/L		06/04/24 09:00	06/05/24 11:31	1
Cadmium	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 11:31	1
<b>Calcium</b>	<b>110</b>		0.20		mg/L		06/04/24 09:00	06/05/24 11:31	1
Chromium	<0.0050		0.0050		mg/L		06/04/24 09:00	06/05/24 11:31	1
Cobalt	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 11:31	1
Lead	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 11:31	1
Lithium	<0.010		0.010		mg/L		06/04/24 09:00	06/05/24 11:31	1
<b>Molybdenum</b>	<b>0.017</b>		0.0050		mg/L		06/04/24 09:00	06/05/24 11:31	1
Selenium	<0.0025		0.0025		mg/L		06/04/24 09:00	06/05/24 11:31	1
Thallium	<0.0020		0.0020		mg/L		06/04/24 09:00	06/05/24 11:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/30/24 15:15	05/31/24 09:43	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>650</b>		10		mg/L			05/21/24 23:22	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>91</b>		10		mg/L			05/23/24 16:26	5
<b>Fluoride (SM 4500 F C)</b>	<b>0.20</b>		0.10		mg/L			05/31/24 11:37	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>210</b>		25		mg/L			05/28/24 17:14	5

# Client Sample Results

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

Job ID: 500-250785-1

**Client Sample ID: MW-02**  
Date Collected: 05/20/24 12:14  
Date Received: 05/21/24 09:50

**Lab Sample ID: 500-250785-2**  
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/04/24 09:00	06/05/24 11:33	1
<b>Arsenic</b>	<b>0.0087</b>		0.0010		mg/L		06/04/24 09:00	06/05/24 11:33	1
<b>Barium</b>	<b>0.057</b>		0.0025		mg/L		06/04/24 09:00	06/05/24 11:33	1
Beryllium	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 11:33	1
<b>Boron</b>	<b>5.1</b>		0.050		mg/L		06/04/24 09:00	06/05/24 11:33	1
Cadmium	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 11:33	1
<b>Calcium</b>	<b>170</b>		0.20		mg/L		06/04/24 09:00	06/05/24 11:33	1
Chromium	<0.0050		0.0050		mg/L		06/04/24 09:00	06/05/24 11:33	1
Cobalt	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 11:33	1
Lead	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 11:33	1
Lithium	<0.010		0.010		mg/L		06/04/24 09:00	06/05/24 11:33	1
<b>Molybdenum</b>	<b>0.017</b>		0.0050		mg/L		06/04/24 09:00	06/05/24 11:33	1
<b>Selenium</b>	<b>0.015</b>		0.0025		mg/L		06/04/24 09:00	06/05/24 11:33	1
Thallium	<0.0020		0.0020		mg/L		06/04/24 09:00	06/05/24 11:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/30/24 15:15	05/31/24 09:52	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>980</b>		10		mg/L			05/21/24 23:24	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>70</b>		4.0		mg/L			05/23/24 16:26	2
<b>Fluoride (SM 4500 F C)</b>	<b>0.24</b>		0.10		mg/L			05/31/24 11:43	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>360</b>		50		mg/L			05/28/24 17:14	10

# Client Sample Results

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

Job ID: 500-250785-1

**Client Sample ID: MW-03**  
Date Collected: 05/20/24 13:59  
Date Received: 05/21/24 09:50

**Lab Sample ID: 500-250785-3**  
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/04/24 09:00	06/05/24 11:39	1
<b>Arsenic</b>	<b>0.035</b>		0.0010		mg/L		06/04/24 09:00	06/05/24 11:39	1
<b>Barium</b>	<b>0.0054</b>		0.0025		mg/L		06/04/24 09:00	06/05/24 11:39	1
Beryllium	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 11:39	1
<b>Boron</b>	<b>2.9</b>		0.050		mg/L		06/04/24 09:00	06/05/24 11:39	1
Cadmium	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 11:39	1
<b>Calcium</b>	<b>29</b>		0.20		mg/L		06/04/24 09:00	06/05/24 11:39	1
Chromium	<0.0050		0.0050		mg/L		06/04/24 09:00	06/05/24 11:39	1
Cobalt	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 11:39	1
Lead	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 11:39	1
Lithium	<0.010		0.010		mg/L		06/04/24 09:00	06/05/24 11:39	1
<b>Molybdenum</b>	<b>0.052</b>		0.0050		mg/L		06/04/24 09:00	06/05/24 11:39	1
<b>Selenium</b>	<b>0.0033</b>		0.0025		mg/L		06/04/24 09:00	06/05/24 11:39	1
Thallium	<0.0020		0.0020		mg/L		06/04/24 09:00	06/05/24 11:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/30/24 15:15	05/31/24 09:59	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>490</b>		10		mg/L			05/21/24 23:27	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>74</b>		4.0		mg/L			05/23/24 16:25	2
<b>Fluoride (SM 4500 F C)</b>	<b>0.54</b>		0.10		mg/L			05/31/24 11:48	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>170</b>	<b>F1</b>	25		mg/L			05/28/24 17:15	5

# Client Sample Results

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

Job ID: 500-250785-1

**Client Sample ID: Duplicate**  
Date Collected: 05/20/24 00:00  
Date Received: 05/21/24 09:50

**Lab Sample ID: 500-250785-4**  
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/04/24 09:00	06/05/24 11:42	1
<b>Arsenic</b>	<b>0.034</b>		0.0010		mg/L		06/04/24 09:00	06/05/24 11:42	1
<b>Barium</b>	<b>0.0077</b>		0.0025		mg/L		06/04/24 09:00	06/05/24 11:42	1
Beryllium	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 11:42	1
<b>Boron</b>	<b>2.9</b>		0.050		mg/L		06/04/24 09:00	06/05/24 11:42	1
Cadmium	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 11:42	1
<b>Calcium</b>	<b>38</b>		0.20		mg/L		06/04/24 09:00	06/05/24 11:42	1
Chromium	<0.0050		0.0050		mg/L		06/04/24 09:00	06/05/24 11:42	1
Cobalt	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 11:42	1
Lead	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 11:42	1
Lithium	<0.010		0.010		mg/L		06/04/24 09:00	06/05/24 11:42	1
<b>Molybdenum</b>	<b>0.050</b>		0.0050		mg/L		06/04/24 09:00	06/05/24 11:42	1
<b>Selenium</b>	<b>0.0048</b>		0.0025		mg/L		06/04/24 09:00	06/05/24 11:42	1
Thallium	<0.0020		0.0020		mg/L		06/04/24 09:00	06/05/24 11:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/30/24 15:15	05/31/24 10:01	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>490</b>		10		mg/L			05/22/24 00:16	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>75</b>		4.0		mg/L			05/23/24 16:25	2
<b>Fluoride (SM 4500 F C)</b>	<b>0.49</b>		0.10		mg/L			05/31/24 11:54	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>190</b>		50		mg/L			06/09/24 12:12	10



# Client Sample Results

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

Job ID: 500-250785-1

**Client Sample ID: MW-04**  
Date Collected: 05/21/24 08:52  
Date Received: 05/22/24 09:55

**Lab Sample ID: 500-250785-5**  
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/04/24 09:00	06/05/24 11:44	1
<b>Arsenic</b>	<b>0.0060</b>		0.0010		mg/L		06/04/24 09:00	06/05/24 11:44	1
<b>Barium</b>	<b>0.028</b>		0.0025		mg/L		06/04/24 09:00	06/05/24 11:44	1
Beryllium	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 11:44	1
<b>Boron</b>	<b>2.2</b>		0.050		mg/L		06/04/24 09:00	06/05/24 11:44	1
Cadmium	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 11:44	1
<b>Calcium</b>	<b>64</b>		0.20		mg/L		06/04/24 09:00	06/05/24 11:44	1
Chromium	<0.0050		0.0050		mg/L		06/04/24 09:00	06/05/24 11:44	1
Cobalt	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 11:44	1
Lead	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 11:44	1
Lithium	<0.010		0.010		mg/L		06/04/24 09:00	06/05/24 11:44	1
<b>Molybdenum</b>	<b>0.041</b>		0.0050		mg/L		06/04/24 09:00	06/05/24 11:44	1
<b>Selenium</b>	<b>0.0045</b>		0.0025		mg/L		06/04/24 09:00	06/05/24 11:44	1
Thallium	<0.0020		0.0020		mg/L		06/04/24 09:00	06/05/24 11:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/30/24 15:15	05/31/24 10:03	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>450</b>		10		mg/L			05/22/24 21:32	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>58</b>		4.0		mg/L			05/23/24 16:25	2
<b>Fluoride (SM 4500 F C)</b>	<b>0.40</b>		0.10		mg/L			05/31/24 11:59	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>130</b>		25		mg/L			06/09/24 12:13	5

# Client Sample Results

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

Job ID: 500-250785-1

**Client Sample ID: MW-09**

**Lab Sample ID: 500-250785-6**

Date Collected: 05/21/24 10:14

Matrix: Water

Date Received: 05/22/24 09:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/04/24 09:00	06/05/24 11:57	1
<b>Arsenic</b>	<b>0.027</b>		0.0010		mg/L		06/04/24 09:00	06/05/24 11:57	1
<b>Barium</b>	<b>0.13</b>		0.0025		mg/L		06/04/24 09:00	06/05/24 11:57	1
Beryllium	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 11:57	1
<b>Boron</b>	<b>2.3</b>		0.050		mg/L		06/04/24 09:00	06/05/24 11:57	1
Cadmium	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 11:57	1
<b>Calcium</b>	<b>120</b>		0.20		mg/L		06/04/24 09:00	06/05/24 11:57	1
Chromium	<0.0050		0.0050		mg/L		06/04/24 09:00	06/05/24 11:57	1
Cobalt	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 11:57	1
Lead	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 11:57	1
<b>Lithium</b>	<b>0.047</b>		0.010		mg/L		06/04/24 09:00	06/05/24 11:57	1
<b>Molybdenum</b>	<b>0.074</b>		0.0050		mg/L		06/04/24 09:00	06/05/24 11:57	1
Selenium	<0.0025		0.0025		mg/L		06/04/24 09:00	06/05/24 11:57	1
Thallium	<0.0020		0.0020		mg/L		06/04/24 09:00	06/05/24 11:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/30/24 15:15	05/31/24 10:05	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>860</b>		10		mg/L			05/22/24 21:35	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>180</b>		10		mg/L			05/23/24 16:24	5
<b>Fluoride (SM 4500 F C)</b>	<b>0.37</b>		0.10		mg/L			05/31/24 12:05	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>130</b>		25		mg/L			06/09/24 12:14	5

# Client Sample Results

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

Job ID: 500-250785-1

**Client Sample ID: MW-11**  
**Date Collected: 05/21/24 13:11**  
**Date Received: 05/22/24 09:55**

**Lab Sample ID: 500-250785-7**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/04/24 09:00	06/05/24 11:59	1
<b>Arsenic</b>	<b>0.10</b>		0.0010		mg/L		06/04/24 09:00	06/05/24 11:59	1
<b>Barium</b>	<b>0.052</b>		0.0025		mg/L		06/04/24 09:00	06/05/24 11:59	1
Beryllium	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 11:59	1
<b>Boron</b>	<b>1.3</b>		0.050		mg/L		06/04/24 09:00	06/05/24 11:59	1
Cadmium	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 11:59	1
<b>Calcium</b>	<b>140</b>		0.20		mg/L		06/04/24 09:00	06/05/24 11:59	1
<b>Chromium</b>	<b>0.0051</b>		0.0050		mg/L		06/04/24 09:00	06/05/24 11:59	1
Cobalt	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 11:59	1
Lead	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 11:59	1
<b>Lithium</b>	<b>0.030</b>		0.010		mg/L		06/04/24 09:00	06/05/24 11:59	1
Molybdenum	<0.0050		0.0050		mg/L		06/04/24 09:00	06/05/24 11:59	1
Selenium	<0.0025		0.0025		mg/L		06/04/24 09:00	06/05/24 11:59	1
Thallium	<0.0020		0.0020		mg/L		06/04/24 09:00	06/05/24 11:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/30/24 15:15	05/31/24 10:07	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>800</b>		10		mg/L			05/22/24 21:37	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>93</b>		10		mg/L			05/23/24 16:24	5
<b>Fluoride (SM 4500 F C)</b>	<b>0.16</b>		0.10		mg/L			05/31/24 12:09	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>67</b>		10		mg/L			06/09/24 12:14	2

# Client Sample Results

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

Job ID: 500-250785-1

**Client Sample ID: MW-14**  
Date Collected: 05/21/24 14:35  
Date Received: 05/22/24 09:55

**Lab Sample ID: 500-250785-8**  
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.0030</b>		0.0030		mg/L		06/04/24 09:00	06/05/24 12:01	1
<b>Arsenic</b>	<b>0.67</b>		0.0010		mg/L		06/04/24 09:00	06/05/24 12:01	1
<b>Barium</b>	<b>0.036</b>		0.0025		mg/L		06/04/24 09:00	06/05/24 12:01	1
Beryllium	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 12:01	1
<b>Boron</b>	<b>0.49</b>		0.050		mg/L		06/04/24 09:00	06/05/24 12:01	1
Cadmium	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 12:01	1
<b>Calcium</b>	<b>110</b>		0.20		mg/L		06/04/24 09:00	06/05/24 12:01	1
<b>Chromium</b>	<b>0.098</b>		0.0050		mg/L		06/04/24 09:00	06/05/24 12:01	1
Cobalt	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 12:01	1
Lead	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 12:01	1
<b>Lithium</b>	<b>0.014</b>		0.010		mg/L		06/04/24 09:00	06/05/24 12:01	1
Molybdenum	<0.0050		0.0050		mg/L		06/04/24 09:00	06/05/24 12:01	1
Selenium	<0.0025		0.0025		mg/L		06/04/24 09:00	06/05/24 12:01	1
Thallium	<0.0020		0.0020		mg/L		06/04/24 09:00	06/05/24 12:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/30/24 15:15	05/31/24 10:10	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>430</b>		10		mg/L			05/22/24 21:40	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>9.9</b>		2.0		mg/L			05/23/24 17:26	1
<b>Fluoride (SM 4500 F C)</b>	<b>0.21</b>		0.10		mg/L			05/31/24 12:14	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>16</b>		5.0		mg/L			06/09/24 11:53	1

# Client Sample Results

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

Job ID: 500-250785-1

**Client Sample ID: MW-16**

**Lab Sample ID: 500-250785-9**

**Date Collected: 05/21/24 11:54**

**Matrix: Water**

**Date Received: 05/22/24 09:55**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/04/24 09:00	06/05/24 12:03	1
Arsenic	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 12:03	1
<b>Barium</b>	<b>0.032</b>		0.0025		mg/L		06/04/24 09:00	06/05/24 12:03	1
Beryllium	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 12:03	1
<b>Boron</b>	<b>5.0</b>		0.050		mg/L		06/04/24 09:00	06/05/24 12:03	1
Cadmium	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 12:03	1
<b>Calcium</b>	<b>160</b>		0.20		mg/L		06/04/24 09:00	06/05/24 12:03	1
Chromium	<0.0050		0.0050		mg/L		06/04/24 09:00	06/05/24 12:03	1
Cobalt	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 12:03	1
Lead	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 12:03	1
<b>Lithium</b>	<b>0.019</b>		0.010		mg/L		06/04/24 09:00	06/05/24 12:03	1
<b>Molybdenum</b>	<b>0.020</b>		0.0050		mg/L		06/04/24 09:00	06/05/24 12:03	1
<b>Selenium</b>	<b>0.0057</b>		0.0025		mg/L		06/04/24 09:00	06/05/24 12:03	1
Thallium	<0.0020		0.0020		mg/L		06/04/24 09:00	06/05/24 12:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/30/24 15:15	05/31/24 10:12	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>940</b>		10		mg/L			05/22/24 21:43	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>65</b>	<b>F1</b>	4.0		mg/L			05/23/24 17:27	2
<b>Fluoride (SM 4500 F C)</b>	<b>0.50</b>		0.10		mg/L			05/31/24 12:28	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>430</b>		100		mg/L			06/09/24 12:15	20

# Definitions/Glossary

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

Job ID: 500-250785-1

## Qualifiers

### General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

## 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

Job ID: 500-250785-1

## Metals

### Prep Batch: 770258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-250785-1	MW-01	Total/NA	Water	7470A	
500-250785-2	MW-02	Total/NA	Water	7470A	
500-250785-3	MW-03	Total/NA	Water	7470A	
500-250785-4	Duplicate	Total/NA	Water	7470A	
500-250785-5	MW-04	Total/NA	Water	7470A	
500-250785-6	MW-09	Total/NA	Water	7470A	
500-250785-7	MW-11	Total/NA	Water	7470A	
500-250785-8	MW-14	Total/NA	Water	7470A	
500-250785-9	MW-16	Total/NA	Water	7470A	
MB 500-770258/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-770258/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-250785-1 MS	MW-01	Total/NA	Water	7470A	
500-250785-1 MSD	MW-01	Total/NA	Water	7470A	
500-250785-1 DU	MW-01	Total/NA	Water	7470A	

### Analysis Batch: 770441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-250785-1	MW-01	Total/NA	Water	7470A	770258
500-250785-2	MW-02	Total/NA	Water	7470A	770258
500-250785-3	MW-03	Total/NA	Water	7470A	770258
500-250785-4	Duplicate	Total/NA	Water	7470A	770258
500-250785-5	MW-04	Total/NA	Water	7470A	770258
500-250785-6	MW-09	Total/NA	Water	7470A	770258
500-250785-7	MW-11	Total/NA	Water	7470A	770258
500-250785-8	MW-14	Total/NA	Water	7470A	770258
500-250785-9	MW-16	Total/NA	Water	7470A	770258
MB 500-770258/12-A	Method Blank	Total/NA	Water	7470A	770258
LCS 500-770258/13-A	Lab Control Sample	Total/NA	Water	7470A	770258
500-250785-1 MS	MW-01	Total/NA	Water	7470A	770258
500-250785-1 MSD	MW-01	Total/NA	Water	7470A	770258
500-250785-1 DU	MW-01	Total/NA	Water	7470A	770258

### Prep Batch: 770857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-250785-1	MW-01	Total Recoverable	Water	3005A	
500-250785-2	MW-02	Total Recoverable	Water	3005A	
500-250785-3	MW-03	Total Recoverable	Water	3005A	
500-250785-4	Duplicate	Total Recoverable	Water	3005A	
500-250785-5	MW-04	Total Recoverable	Water	3005A	
500-250785-6	MW-09	Total Recoverable	Water	3005A	
500-250785-7	MW-11	Total Recoverable	Water	3005A	
500-250785-8	MW-14	Total Recoverable	Water	3005A	
500-250785-9	MW-16	Total Recoverable	Water	3005A	
MB 500-770857/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-770857/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Analysis Batch: 771122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-250785-1	MW-01	Total Recoverable	Water	6020B	770857
500-250785-2	MW-02	Total Recoverable	Water	6020B	770857
500-250785-3	MW-03	Total Recoverable	Water	6020B	770857

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# QC Association Summary

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

Job ID: 500-250785-1

## Metals (Continued)

### Analysis Batch: 771122 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-250785-4	Duplicate	Total Recoverable	Water	6020B	770857
500-250785-5	MW-04	Total Recoverable	Water	6020B	770857
500-250785-6	MW-09	Total Recoverable	Water	6020B	770857
500-250785-7	MW-11	Total Recoverable	Water	6020B	770857
500-250785-8	MW-14	Total Recoverable	Water	6020B	770857
500-250785-9	MW-16	Total Recoverable	Water	6020B	770857
MB 500-770857/1-A	Method Blank	Total Recoverable	Water	6020B	770857
LCS 500-770857/2-A	Lab Control Sample	Total Recoverable	Water	6020B	770857

## General Chemistry

### Analysis Batch: 768971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-250785-1	MW-01	Total/NA	Water	SM 2540C	
500-250785-2	MW-02	Total/NA	Water	SM 2540C	
500-250785-3	MW-03	Total/NA	Water	SM 2540C	
MB 500-768971/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-768971/2	Lab Control Sample	Total/NA	Water	SM 2540C	

### Analysis Batch: 768974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-250785-4	Duplicate	Total/NA	Water	SM 2540C	
MB 500-768974/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-768974/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-250785-4 MS	Duplicate	Total/NA	Water	SM 2540C	
500-250785-4 DU	Duplicate	Total/NA	Water	SM 2540C	

### Analysis Batch: 769175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-250785-5	MW-04	Total/NA	Water	SM 2540C	
500-250785-6	MW-09	Total/NA	Water	SM 2540C	
500-250785-7	MW-11	Total/NA	Water	SM 2540C	
500-250785-8	MW-14	Total/NA	Water	SM 2540C	
500-250785-9	MW-16	Total/NA	Water	SM 2540C	
MB 500-769175/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-769175/2	Lab Control Sample	Total/NA	Water	SM 2540C	

### Analysis Batch: 769736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-250785-1	MW-01	Total/NA	Water	SM 4500 CI- E	
500-250785-2	MW-02	Total/NA	Water	SM 4500 CI- E	
500-250785-3	MW-03	Total/NA	Water	SM 4500 CI- E	
500-250785-4	Duplicate	Total/NA	Water	SM 4500 CI- E	
500-250785-5	MW-04	Total/NA	Water	SM 4500 CI- E	
500-250785-6	MW-09	Total/NA	Water	SM 4500 CI- E	
500-250785-7	MW-11	Total/NA	Water	SM 4500 CI- E	
500-250785-8	MW-14	Total/NA	Water	SM 4500 CI- E	
500-250785-9	MW-16	Total/NA	Water	SM 4500 CI- E	
MB 500-769736/112	Method Blank	Total/NA	Water	SM 4500 CI- E	
MB 500-769736/78	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-769736/113	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

Job ID: 500-250785-1

## General Chemistry (Continued)

### Analysis Batch: 769736 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-769736/79	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-250785-9 MS	MW-16	Total/NA	Water	SM 4500 Cl- E	
500-250785-9 MSD	MW-16	Total/NA	Water	SM 4500 Cl- E	

### Analysis Batch: 769954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-250785-1	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-250785-2	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-250785-3	MW-03	Total/NA	Water	SM 4500 SO4 E	
MB 500-769954/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-769954/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-250785-3 MS	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-250785-3 MSD	MW-03	Total/NA	Water	SM 4500 SO4 E	

### Analysis Batch: 770479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-250785-1	MW-01	Total/NA	Water	SM 4500 F C	
500-250785-2	MW-02	Total/NA	Water	SM 4500 F C	
500-250785-3	MW-03	Total/NA	Water	SM 4500 F C	
500-250785-4	Duplicate	Total/NA	Water	SM 4500 F C	
500-250785-5	MW-04	Total/NA	Water	SM 4500 F C	
500-250785-6	MW-09	Total/NA	Water	SM 4500 F C	
500-250785-7	MW-11	Total/NA	Water	SM 4500 F C	
500-250785-8	MW-14	Total/NA	Water	SM 4500 F C	
500-250785-9	MW-16	Total/NA	Water	SM 4500 F C	
MB 500-770479/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-770479/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

### Analysis Batch: 771679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-250785-4	Duplicate	Total/NA	Water	SM 4500 SO4 E	
500-250785-5	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-250785-6	MW-09	Total/NA	Water	SM 4500 SO4 E	
500-250785-7	MW-11	Total/NA	Water	SM 4500 SO4 E	
500-250785-8	MW-14	Total/NA	Water	SM 4500 SO4 E	
500-250785-9	MW-16	Total/NA	Water	SM 4500 SO4 E	
MB 500-771679/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-771679/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

# QC Sample Results

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

Job ID: 500-250785-1

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

**Lab Sample ID: MB 500-770857/1-A**  
**Matrix: Water**  
**Analysis Batch: 771122**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 770857**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/04/24 09:00	06/05/24 11:55	1
Arsenic	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 11:55	1
Barium	<0.0025		0.0025		mg/L		06/04/24 09:00	06/05/24 11:55	1
Beryllium	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 11:55	1
Boron	<0.050		0.050		mg/L		06/04/24 09:00	06/05/24 11:55	1
Cadmium	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 11:55	1
Calcium	<0.20		0.20		mg/L		06/04/24 09:00	06/05/24 11:55	1
Chromium	<0.0050		0.0050		mg/L		06/04/24 09:00	06/05/24 11:55	1
Cobalt	<0.0010		0.0010		mg/L		06/04/24 09:00	06/05/24 11:55	1
Lead	<0.00050		0.00050		mg/L		06/04/24 09:00	06/05/24 11:55	1
Lithium	<0.010		0.010		mg/L		06/04/24 09:00	06/05/24 11:55	1
Molybdenum	<0.0050		0.0050		mg/L		06/04/24 09:00	06/05/24 11:55	1
Selenium	<0.0025		0.0025		mg/L		06/04/24 09:00	06/05/24 11:55	1
Thallium	<0.0020		0.0020		mg/L		06/04/24 09:00	06/05/24 11:55	1

**Lab Sample ID: LCS 500-770857/2-A**  
**Matrix: Water**  
**Analysis Batch: 771122**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 770857**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.496		mg/L		99	80 - 120
Arsenic	0.100	0.0976		mg/L		98	80 - 120
Barium	2.00	2.10		mg/L		105	80 - 120
Beryllium	0.0500	0.0515		mg/L		103	80 - 120
Boron	1.00	1.06		mg/L		106	80 - 120
Cadmium	0.0500	0.0506		mg/L		101	80 - 120
Calcium	10.0	9.11		mg/L		91	80 - 120
Chromium	0.200	0.208		mg/L		104	80 - 120
Cobalt	0.500	0.533		mg/L		107	80 - 120
Lead	0.100	0.102		mg/L		102	80 - 120
Lithium	0.500	0.518		mg/L		104	80 - 120
Molybdenum	1.00	0.967		mg/L		97	80 - 120
Selenium	0.100	0.0990		mg/L		99	80 - 120
Thallium	0.100	0.105		mg/L		105	80 - 120

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 500-770258/12-A**  
**Matrix: Water**  
**Analysis Batch: 770441**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 770258**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/30/24 15:15	05/31/24 08:56	1

# QC Sample Results

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

Job ID: 500-250785-1

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

**Lab Sample ID: LCS 500-770258/13-A**  
**Matrix: Water**  
**Analysis Batch: 770441**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 770258**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00201	0.00196		mg/L		98	80 - 120

**Lab Sample ID: 500-250785-1 MS**  
**Matrix: Water**  
**Analysis Batch: 770441**

**Client Sample ID: MW-01**  
**Prep Type: Total/NA**  
**Prep Batch: 770258**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.00020		0.00100	0.00104		mg/L		104	75 - 125

**Lab Sample ID: 500-250785-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 770441**

**Client Sample ID: MW-01**  
**Prep Type: Total/NA**  
**Prep Batch: 770258**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.00020		0.00100	0.00102		mg/L		102	75 - 125	2	20

**Lab Sample ID: 500-250785-1 DU**  
**Matrix: Water**  
**Analysis Batch: 770441**

**Client Sample ID: MW-01**  
**Prep Type: Total/NA**  
**Prep Batch: 770258**

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 500-768971/1**  
**Matrix: Water**  
**Analysis Batch: 768971**

**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			05/21/24 22:28	1

**Lab Sample ID: LCS 500-768971/2**  
**Matrix: Water**  
**Analysis Batch: 768971**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	268		mg/L		107	80 - 120

**Lab Sample ID: MB 500-768974/1**  
**Matrix: Water**  
**Analysis Batch: 768974**

**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			05/22/24 00:11	1

# QC Sample Results

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

Job ID: 500-250785-1

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

**Lab Sample ID: LCS 500-768974/2**  
**Matrix: Water**  
**Analysis Batch: 768974**

**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	260		mg/L		104	80 - 120

**Lab Sample ID: 500-250785-4 MS**  
**Matrix: Water**  
**Analysis Batch: 768974**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	490		250	802		mg/L		123	75 - 125

**Lab Sample ID: 500-250785-4 DU**  
**Matrix: Water**  
**Analysis Batch: 768974**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	490		498		mg/L		0.8	5

**Lab Sample ID: MB 500-769175/1**  
**Matrix: Water**  
**Analysis Batch: 769175**

**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			05/22/24 20:54	1

**Lab Sample ID: LCS 500-769175/2**  
**Matrix: Water**  
**Analysis Batch: 769175**

**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	274		mg/L		110	80 - 120

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

**Lab Sample ID: MB 500-769736/112**  
**Matrix: Water**  
**Analysis Batch: 769736**

**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			05/23/24 17:22	1

**Lab Sample ID: MB 500-769736/78**  
**Matrix: Water**  
**Analysis Batch: 769736**

**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			05/23/24 16:23	1

# QC Sample Results

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

Job ID: 500-250785-1

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

Lab Sample ID: LCS 500-769736/113  
Matrix: Water  
Analysis Batch: 769736

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	21.2		mg/L		106	85 - 115

Lab Sample ID: LCS 500-769736/79  
Matrix: Water  
Analysis Batch: 769736

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

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

Lab Sample ID: 500-250785-9 MS  
Matrix: Water  
Analysis Batch: 769736

Client Sample ID: MW-16  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	65	F1	20.0	79.1	F1	mg/L		71	75 - 125

Lab Sample ID: 500-250785-9 MSD  
Matrix: Water  
Analysis Batch: 769736

Client Sample ID: MW-16  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	65	F1	20.0	80.2		mg/L		77	75 - 125	1	20

## Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-770479/3  
Matrix: Water  
Analysis Batch: 770479

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			05/31/24 11:26	1

Lab Sample ID: LCS 500-770479/4  
Matrix: Water  
Analysis Batch: 770479

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	9.87		mg/L		99	90 - 119

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

Lab Sample ID: MB 500-769954/16  
Matrix: Water  
Analysis Batch: 769954

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			05/28/24 16:38	1

# QC Sample Results

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

Job ID: 500-250785-1

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

**Lab Sample ID: LCS 500-769954/17**  
**Matrix: Water**  
**Analysis Batch: 769954**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	20.0	21.4		mg/L		107	88 - 123

**Lab Sample ID: 500-250785-3 MS**  
**Matrix: Water**  
**Analysis Batch: 769954**

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	170	F1	100	189	F1	mg/L		17	75 - 125

**Lab Sample ID: 500-250785-3 MSD**  
**Matrix: Water**  
**Analysis Batch: 769954**

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	170	F1	100	200	F1	mg/L		28	75 - 125	6	20

**Lab Sample ID: MB 500-771679/16**  
**Matrix: Water**  
**Analysis Batch: 771679**

**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			06/09/24 11:51	1

**Lab Sample ID: LCS 500-771679/17**  
**Matrix: Water**  
**Analysis Batch: 771679**

**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	20.7		mg/L		104	88 - 123

**Eurofins Chicago**

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

**Chain of Custody Record**

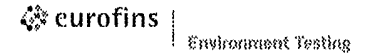
eurofins | Environment Testing  
 500-250785


<b>Client Information</b>		Sampler: <u>Jack Misner</u>		Lab PM: <u>Mockler, Diana J</u>		Carrier Tracking No(s):		COC No: <u>500-123639-44027 1</u>	
Client Contact: <u>Jack Misner</u>		Phone: <u>(708) 622-1143</u>		E-Mail: <u>Diana Mockler@et.eurofins.com</u>		State of Origin: <u>IL</u>		Page: <u>Page 1 of 1</u>	
Company: <u>KPRG and Associates, Inc.</u>		PWSID:		Analysis Requested:		Job #: <u>12313.2</u>		Preservation Codes: D - HNO3 N - None	
Address: <u>14865 West Lisbon Road, Suite 1A</u>		Due Date Requested: <u>Standard</u>		TAT Requested (days):		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Other:	
City: <u>Brookfield</u>		PO #: <u>4502102435</u>		WO #:		Project Name: <u>Waukegan CCR Event Desc. Quarterly Waukegan CCR</u>		Project #: <u>50011597</u>	
State, Zip: <u>WI, 53005</u>		SSOW#:		Site: <u>Illinois</u>		Phone: <u>500-250785 COC</u>		Email: <u>jackkm@kprginc.com</u>	
Email: <u>jackkm@kprginc.com</u>		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=wastebtl, BT=Tissue, A=Air)	
Project Name: <u>Waukegan CCR Event Desc. Quarterly Waukegan CCR</u>		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=wastebtl, BT=Tissue, A=Air)	
Site: <u>Illinois</u>		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=wastebtl, BT=Tissue, A=Air)	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=wastebtl, BT=Tissue, A=Air)	
MW-01		5/20/24		1048		G		Water	
MW-02		5/20/24		1151/24		G		Water	
MW-03		5/20/24		1359		G		Water	
MW-04								Water	
MW-05								Water	
MW-11								Water	
MW-14								Water	
MW-16								Water	
Duplicate		5/20/24		-		G		Water	
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Special Instructions/QC Requirements		Cooler Temperature(s) °C and Other Remarks		0.8-20.9	
<input checked="" 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 checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements		Cooler Temperature(s) °C and Other Remarks		0.8-20.9	
Deliverable Requested I, II, III, IV, Other (specify)		Empty Kit Relinquished by		Date		Time		Method of Shipment:	
Relinquished by: <u>Jack Misner</u>		Date/Time: <u>5/20/24 1620</u>		Company: <u>KPRG</u>		Received by: <u>FedEx</u>		Date/Time: <u>5/20/24</u>	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Company:		Received by: <u>John Smith</u>		Date/Time: <u>5/21/24 0950</u>	
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		0.8-20.9			

**Eurofins Chicago**

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

**Chain of Custody Record**



<b>Client Information</b>		Sampler: <i>Jack Misner</i>		Lab PM: Mockler, Diana J		Carrier Tracking No(s)		COC No. 500-123639-41027 1		
Client Contact: <i>Jack Misner</i>		Phone: <i>(202)-622-1143</i>		E-Mail: Diana Mockler@et.eurofinsus.com		State of Origin: <i>IL</i>		Page: Page 1 of 1		
Company: KPRG and Associates, Inc.				PWSID		<b>Analysis Requested</b>				
Address: 14665 West Lisbon Road, Suite 1A		Due Date Requested		Field Filtered Sample (Yes or No) Perform MS/MS (Yes or No) 903.0, 904.0 6010C, 6020A, 7470A 2540C, 4500_F_C, SM4500_Cl_E, SM4500_S04_E 180.1 - Turbidity		 500-250785 COC		Job #: <i>12313, 2</i>		
City: Brookfield		TAT Requested (days)						Preservation Codes: D - HNO3 N - None <i>500-250785</i>		
Slate, Zip: WI, 53005		Compliance Project <input type="checkbox"/> Yes <input type="checkbox"/> No						Other:		
Phone: 262-781-0475(Tel)		PO #: 4502102435						Special Instructions/Note:		
Email: <i>jackm@kprginc.com</i>		WO #								
Project Name: Waukegan CCR Event Desc. Quarterly Waukegan CCR		Project #: 50011597								
Site: Illinois		SSOW#								
<b>Sample Identification</b>		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=wastefoil, BT=Tissue, A=Air)		
								Total Number of Containers		
<del>MW-01</del>								Water		
<del>MW-02</del>								Water		
<del>MW-03</del>								Water		
5 MW-04		<i>5/21/24</i>		<i>0852</i>		<i>G</i>		Water <i>NU XX XX</i>		
6 MW-09		<i>↓</i>		<i>1014</i>		<i>↓</i>		Water <i>NU XX XX</i>		
7 MW-11		<i>↓</i>		<i>1311</i>		<i>↓</i>		Water <i>NU XX XX</i>		
8 MW-14		<i>↓</i>		<i>1435</i>		<i>↓</i>		Water <i>NU XX XX</i>		
9 MW-16		<i>5/21/24</i>		<i>1154</i>		<i>G</i>		Water <i>NU XX XX</i>		
<del>Duplicate</del>								Water		
								Water		
<b>Possible Hazard Identification</b>					<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>					
<input checked="" 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 checked="" 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>Jack Misner</i>		Date/Time: <i>5/21/24 1615</i>		Company: <i>KPRG</i>		Received by: <i>FedEx</i>		Date/Time: <i>5/21/24 1615</i>		Company: <i>FedEx</i>
Relinquished by:		Date/Time:		Company:		Received by: <i>Stephanie Hernandez</i>		Date/Time: <i>5/22/24 0955</i>		Company: <i>FEIA</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>6.2+5.9, 2.8+2.4</i>				







Do Not Lift Using This Tag



500-250785 Waybi

ORIGIN ID: FEPA (262) 622-1143  
JACK MISNER  
KPRG AND ASSOCIATES  
414 PLAZA DR STE 106  
WESTMONT, IL 60559  
UNITED STATES US

SHIP DATE: 21MAY24  
ACTWGT: 60.10 LB  
CAD: 6994083/SSFE2500  
DIMS: 24x14x14 IN  
BILL THIRD PARTY

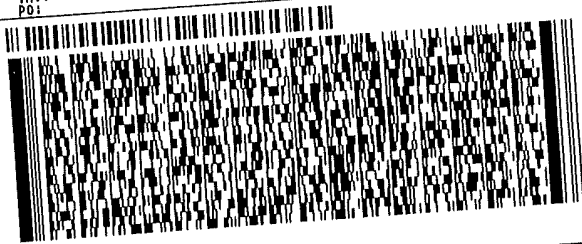
Part # 156291-335 RR02 EXP 10/24

TO  
EUROFINS CHICAGO  
2417 BOND ST

UNIVERSITY PARK IL 60484

(888) 888-8888  
INU: PD:

REF: DEPT:



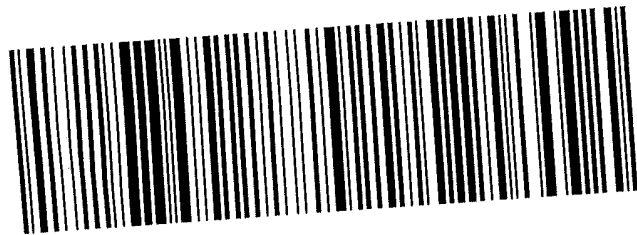
At 1092509282427

2 of 3  
WED - 22 MAY 10:30A  
PRIORITY OVERNIGHT  
AHS  
60484  
IL-US ORD

MPS# 2749 5320 6396  
0263  
Mstr# 2749 5320 6385

0201

79 JOTA



ORIGIN ID: FEPA (262) 622-1143  
JACK MISNER  
KPRG AND ASSOCIATES  
414 PLAZA DR STE 106  
WESTMONT, IL 60559  
UNITED STATES US

SHIP DATE: 21MAY24  
ACTWGT: 62.35 LB  
CAD: 6994083/SSFE2500  
DIMS: 24x14x14 IN  
BILL THIRD PARTY

Part # 156291-335 RR02 EXP 10/24

TO  
EUROFINS CHICAGO  
2417 BOND ST

UNIVERSITY PARK IL 60484

(888) 888-8888  
INU: PD:

REF: DEPT:



At 1092509282427

1 of 3  
TRK# 2749 5320 6385  
0201  
## MASTER ##

WED - 22 MAY 10:30A  
PRIORITY OVERNIGHT  
AHS  
60484  
IL-US ORD

79 JOTA



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- 13

# Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-250785-1

**Login Number: 250785**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9,5.9,2.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Lab Chronicle

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

Job ID: 500-250785-1

**Client Sample ID: MW-01**  
**Date Collected: 05/20/24 10:48**  
**Date Received: 05/21/24 09:50**

**Lab Sample ID: 500-250785-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			770857	BDE	EET CHI	06/04/24 09:00 - 06/04/24 14:00 <sup>1</sup>
Total Recoverable	Analysis	6020B		1	771122	RN	EET CHI	06/05/24 11:31
Total/NA	Prep	7470A			770258	MJG	EET CHI	05/30/24 15:15 - 05/30/24 17:15 <sup>1</sup>
Total/NA	Analysis	7470A		1	770441	MJG	EET CHI	05/31/24 09:43
Total/NA	Analysis	SM 2540C		1	768971	CLB	EET CHI	05/21/24 23:22
Total/NA	Analysis	SM 4500 CI- E		5	769736	TR	EET CHI	05/23/24 16:26
Total/NA	Analysis	SM 4500 F C		1	770479	SO	EET CHI	05/31/24 11:37
Total/NA	Analysis	SM 4500 SO4 E		5	769954	TR	EET CHI	05/28/24 17:14

**Client Sample ID: MW-02**  
**Date Collected: 05/20/24 12:14**  
**Date Received: 05/21/24 09:50**

**Lab Sample ID: 500-250785-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			770857	BDE	EET CHI	06/04/24 09:00 - 06/04/24 14:00 <sup>1</sup>
Total Recoverable	Analysis	6020B		1	771122	RN	EET CHI	06/05/24 11:33
Total/NA	Prep	7470A			770258	MJG	EET CHI	05/30/24 15:15 - 05/30/24 17:15 <sup>1</sup>
Total/NA	Analysis	7470A		1	770441	MJG	EET CHI	05/31/24 09:52
Total/NA	Analysis	SM 2540C		1	768971	CLB	EET CHI	05/21/24 23:24
Total/NA	Analysis	SM 4500 CI- E		2	769736	TR	EET CHI	05/23/24 16:26
Total/NA	Analysis	SM 4500 F C		1	770479	SO	EET CHI	05/31/24 11:43
Total/NA	Analysis	SM 4500 SO4 E		10	769954	TR	EET CHI	05/28/24 17:14

**Client Sample ID: MW-03**  
**Date Collected: 05/20/24 13:59**  
**Date Received: 05/21/24 09:50**

**Lab Sample ID: 500-250785-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			770857	BDE	EET CHI	06/04/24 09:00 - 06/04/24 14:00 <sup>1</sup>
Total Recoverable	Analysis	6020B		1	771122	RN	EET CHI	06/05/24 11:39
Total/NA	Prep	7470A			770258	MJG	EET CHI	05/30/24 15:15 - 05/30/24 17:15 <sup>1</sup>
Total/NA	Analysis	7470A		1	770441	MJG	EET CHI	05/31/24 09:59
Total/NA	Analysis	SM 2540C		1	768971	CLB	EET CHI	05/21/24 23:27
Total/NA	Analysis	SM 4500 CI- E		2	769736	TR	EET CHI	05/23/24 16:25
Total/NA	Analysis	SM 4500 F C		1	770479	SO	EET CHI	05/31/24 11:48
Total/NA	Analysis	SM 4500 SO4 E		5	769954	TR	EET CHI	05/28/24 17:15

**Client Sample ID: Duplicate**  
**Date Collected: 05/20/24 00:00**  
**Date Received: 05/21/24 09:50**

**Lab Sample ID: 500-250785-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			770857	BDE	EET CHI	06/04/24 09:00 - 06/04/24 14:00 <sup>1</sup>
Total Recoverable	Analysis	6020B		1	771122	RN	EET CHI	06/05/24 11:42

Eurofins Chicago

# Lab Chronicle

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

Job ID: 500-250785-1

**Client Sample ID: Duplicate**  
**Date Collected: 05/20/24 00:00**  
**Date Received: 05/21/24 09:50**

**Lab Sample ID: 500-250785-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			770258	MJG	EET CHI	05/30/24 15:15 - 05/30/24 17:15 <sup>1</sup>
Total/NA	Analysis	7470A		1	770441	MJG	EET CHI	05/31/24 10:01
Total/NA	Analysis	SM 2540C		1	768974	CLB	EET CHI	05/22/24 00:16
Total/NA	Analysis	SM 4500 CI- E		2	769736	TR	EET CHI	05/23/24 16:25
Total/NA	Analysis	SM 4500 F C		1	770479	SO	EET CHI	05/31/24 11:54
Total/NA	Analysis	SM 4500 SO4 E		10	771679	TR	EET CHI	06/09/24 12:12

**Client Sample ID: MW-04**  
**Date Collected: 05/21/24 08:52**  
**Date Received: 05/22/24 09:55**

**Lab Sample ID: 500-250785-5**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			770857	BDE	EET CHI	06/04/24 09:00 - 06/04/24 14:00 <sup>1</sup>
Total Recoverable	Analysis	6020B		1	771122	RN	EET CHI	06/05/24 11:44
Total/NA	Prep	7470A			770258	MJG	EET CHI	05/30/24 15:15 - 05/30/24 17:15 <sup>1</sup>
Total/NA	Analysis	7470A		1	770441	MJG	EET CHI	05/31/24 10:03
Total/NA	Analysis	SM 2540C		1	769175	CLB	EET CHI	05/22/24 21:32
Total/NA	Analysis	SM 4500 CI- E		2	769736	TR	EET CHI	05/23/24 16:25
Total/NA	Analysis	SM 4500 F C		1	770479	SO	EET CHI	05/31/24 11:59
Total/NA	Analysis	SM 4500 SO4 E		5	771679	TR	EET CHI	06/09/24 12:13

**Client Sample ID: MW-09**  
**Date Collected: 05/21/24 10:14**  
**Date Received: 05/22/24 09:55**

**Lab Sample ID: 500-250785-6**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			770857	BDE	EET CHI	06/04/24 09:00 - 06/04/24 14:00 <sup>1</sup>
Total Recoverable	Analysis	6020B		1	771122	RN	EET CHI	06/05/24 11:57
Total/NA	Prep	7470A			770258	MJG	EET CHI	05/30/24 15:15 - 05/30/24 17:15 <sup>1</sup>
Total/NA	Analysis	7470A		1	770441	MJG	EET CHI	05/31/24 10:05
Total/NA	Analysis	SM 2540C		1	769175	CLB	EET CHI	05/22/24 21:35
Total/NA	Analysis	SM 4500 CI- E		5	769736	TR	EET CHI	05/23/24 16:24
Total/NA	Analysis	SM 4500 F C		1	770479	SO	EET CHI	05/31/24 12:05
Total/NA	Analysis	SM 4500 SO4 E		5	771679	TR	EET CHI	06/09/24 12:14

**Client Sample ID: MW-11**  
**Date Collected: 05/21/24 13:11**  
**Date Received: 05/22/24 09:55**

**Lab Sample ID: 500-250785-7**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			770857	BDE	EET CHI	06/04/24 09:00 - 06/04/24 14:00 <sup>1</sup>
Total Recoverable	Analysis	6020B		1	771122	RN	EET CHI	06/05/24 11:59
Total/NA	Prep	7470A			770258	MJG	EET CHI	05/30/24 15:15 - 05/30/24 17:15 <sup>1</sup>
Total/NA	Analysis	7470A		1	770441	MJG	EET CHI	05/31/24 10:07

Eurofins Chicago

# Lab Chronicle

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

Job ID: 500-250785-1

**Client Sample ID: MW-11**  
**Date Collected: 05/21/24 13:11**  
**Date Received: 05/22/24 09:55**

**Lab Sample ID: 500-250785-7**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	769175	CLB	EET CHI	05/22/24 21:37
Total/NA	Analysis	SM 4500 CI- E		5	769736	TR	EET CHI	05/23/24 16:24
Total/NA	Analysis	SM 4500 F C		1	770479	SO	EET CHI	05/31/24 12:09
Total/NA	Analysis	SM 4500 SO4 E		2	771679	TR	EET CHI	06/09/24 12:14

**Client Sample ID: MW-14**  
**Date Collected: 05/21/24 14:35**  
**Date Received: 05/22/24 09:55**

**Lab Sample ID: 500-250785-8**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			770857	BDE	EET CHI	06/04/24 09:00 - 06/04/24 14:00 <sup>1</sup>
Total Recoverable	Analysis	6020B		1	771122	RN	EET CHI	06/05/24 12:01
Total/NA	Prep	7470A			770258	MJG	EET CHI	05/30/24 15:15 - 05/30/24 17:15 <sup>1</sup>
Total/NA	Analysis	7470A		1	770441	MJG	EET CHI	05/31/24 10:10
Total/NA	Analysis	SM 2540C		1	769175	CLB	EET CHI	05/22/24 21:40
Total/NA	Analysis	SM 4500 CI- E		1	769736	TR	EET CHI	05/23/24 17:26
Total/NA	Analysis	SM 4500 F C		1	770479	SO	EET CHI	05/31/24 12:14
Total/NA	Analysis	SM 4500 SO4 E		1	771679	TR	EET CHI	06/09/24 11:53

**Client Sample ID: MW-16**  
**Date Collected: 05/21/24 11:54**  
**Date Received: 05/22/24 09:55**

**Lab Sample ID: 500-250785-9**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			770857	BDE	EET CHI	06/04/24 09:00 - 06/04/24 14:00 <sup>1</sup>
Total Recoverable	Analysis	6020B		1	771122	RN	EET CHI	06/05/24 12:03
Total/NA	Prep	7470A			770258	MJG	EET CHI	05/30/24 15:15 - 05/30/24 17:15 <sup>1</sup>
Total/NA	Analysis	7470A		1	770441	MJG	EET CHI	05/31/24 10:12
Total/NA	Analysis	SM 2540C		1	769175	CLB	EET CHI	05/22/24 21:43
Total/NA	Analysis	SM 4500 CI- E		2	769736	TR	EET CHI	05/23/24 17:27
Total/NA	Analysis	SM 4500 F C		1	770479	SO	EET CHI	05/31/24 12:28
Total/NA	Analysis	SM 4500 SO4 E		20	771679	TR	EET CHI	06/09/24 12:15

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

**Laboratory References:**

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

# Accreditation/Certification Summary

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

Job ID: 500-250785-1

## Laboratory: Eurofins Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	05-31-25

1

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# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 6/24/2024 5:46:35 PM

## JOB DESCRIPTION

Waukegan CCR (RAD)

## JOB NUMBER

500-250785-2



# Eurofins Chicago

## Job Notes

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

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

## Authorization



Generated  
6/24/2024 5:46:35 PM

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



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# Case Narrative

Client: KPRG and Associates, Inc.  
Project: Waukegan CCR (RAD)

Job ID: 500-250785-2

**Job ID: 500-250785-2**

**Eurofins Chicago**

## Job Narrative 500-250785-2

### Receipt

The samples were received on 5/21/2024 9:50 AM and 5/22/2024 9:55 AM. 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 0.9°C, 2.4°C and 5.9°C.

### Gas Flow Proportional Counter

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

### Rad

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



# Method Summary

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

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

#### Protocol References:

EPA = US Environmental Protection Agency

None = None

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

#### Laboratory References:

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

# Sample Summary

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-250785-1	MW-01	Water	05/20/24 10:48	05/21/24 09:50
500-250785-2	MW-02	Water	05/20/24 12:14	05/21/24 09:50
500-250785-3	MW-03	Water	05/20/24 13:59	05/21/24 09:50
500-250785-4	Duplicate	Water	05/20/24 00:00	05/21/24 09:50
500-250785-5	MW-04	Water	05/21/24 08:52	05/22/24 09:55
500-250785-6	MW-09	Water	05/21/24 10:14	05/22/24 09:55
500-250785-7	MW-11	Water	05/21/24 13:11	05/22/24 09:55
500-250785-8	MW-14	Water	05/21/24 14:35	05/22/24 09:55
500-250785-9	MW-16	Water	05/21/24 11:54	05/22/24 09:55

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

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

**Client Sample ID: MW-01**  
**Date Collected: 05/20/24 10:48**  
**Date Received: 05/21/24 09:50**

**Lab Sample ID: 500-250785-1**  
**Matrix: Water**

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	<0.167	U	0.106	0.106	1.00	0.167	pCi/L	05/28/24 08:24	06/23/24 11:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		30 - 110					05/28/24 08:24	06/23/24 11:40	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.531	U	0.331	0.333	1.00	0.531	pCi/L	05/28/24 08:30	06/18/24 12:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		30 - 110					05/28/24 08:30	06/18/24 12:26	1
Y Carrier	86.4		30 - 110					05/28/24 08:30	06/18/24 12:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	<0.531	U	0.348	0.349	5.00	0.531	pCi/L		06/24/24 14:47	1

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

**Client Sample ID: MW-02**  
Date Collected: 05/20/24 12:14  
Date Received: 05/21/24 09:50

**Lab Sample ID: 500-250785-2**  
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	<0.115	U	0.0798	0.0803	1.00	0.115	pCi/L	05/28/24 08:24	06/23/24 11:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		30 - 110					05/28/24 08:24	06/23/24 11:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.541	U	0.360	0.364	1.00	0.541	pCi/L	05/28/24 08:30	06/18/24 12:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		30 - 110					05/28/24 08:30	06/18/24 12:26	1
Y Carrier	85.6		30 - 110					05/28/24 08:30	06/18/24 12:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Combined Radium 226 + 228</b>	<b>0.628</b>		0.369	0.373	5.00	0.541	pCi/L		06/24/24 14:47	1

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

**Client Sample ID: MW-03**

**Lab Sample ID: 500-250785-3**

Date Collected: 05/20/24 13:59

Matrix: Water

Date Received: 05/21/24 09:50

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	<0.0964	U	0.0471	0.0471	1.00	0.0964	pCi/L	05/28/24 08:24	06/23/24 11:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.5		30 - 110					05/28/24 08:24	06/23/24 11:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.552	U	0.272	0.272	1.00	0.552	pCi/L	05/28/24 08:30	06/18/24 12:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.5		30 - 110					05/28/24 08:30	06/18/24 12:26	1
Y Carrier	86.0		30 - 110					05/28/24 08:30	06/18/24 12:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	<0.552	U	0.276	0.276	5.00	0.552	pCi/L		06/24/24 14:47	1



# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

**Client Sample ID: Duplicate**  
Date Collected: 05/20/24 00:00  
Date Received: 05/21/24 09:50

**Lab Sample ID: 500-250785-4**  
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	<0.119	U	0.0639	0.0640	1.00	0.119	pCi/L	05/28/24 08:24	06/23/24 11:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					05/28/24 08:24	06/23/24 11:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.647	U	0.411	0.413	1.00	0.647	pCi/L	05/28/24 08:30	06/18/24 12:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					05/28/24 08:30	06/18/24 12:30	1
Y Carrier	81.1		30 - 110					05/28/24 08:30	06/18/24 12:30	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	<0.647	U	0.416	0.418	5.00	0.647	pCi/L		06/24/24 14:47	1

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

**Client Sample ID: MW-04**

**Lab Sample ID: 500-250785-5**

Date Collected: 05/21/24 08:52

Matrix: Water

Date Received: 05/22/24 09:55

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	<0.128	U	0.0906	0.0913	1.00	0.128	pCi/L	05/28/24 08:24	06/23/24 11:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.0		30 - 110					05/28/24 08:24	06/23/24 11:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.526	U	0.270	0.270	1.00	0.526	pCi/L	05/28/24 08:30	06/18/24 12:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.0		30 - 110					05/28/24 08:30	06/18/24 12:31	1
Y Carrier	85.2		30 - 110					05/28/24 08:30	06/18/24 12:31	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	<0.526	U	0.285	0.285	5.00	0.526	pCi/L		06/24/24 14:47	1

# Client Sample Results

Client: KPRG and Associates, Inc.  
 Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

**Client Sample ID: MW-09**  
**Date Collected: 05/21/24 10:14**  
**Date Received: 05/22/24 09:55**

**Lab Sample ID: 500-250785-6**  
**Matrix: Water**

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.431</b>		0.216	0.219	1.00	0.255	pCi/L	05/24/24 08:50	06/18/24 23:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.5		30 - 110					05/24/24 08:50	06/18/24 23:34	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.533	U	0.332	0.333	1.00	0.533	pCi/L	05/24/24 08:54	06/18/24 11:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.5		30 - 110					05/24/24 08:54	06/18/24 11:57	1
Y Carrier	75.9		30 - 110					05/24/24 08:54	06/18/24 11:57	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Combined Radium 226 + 228</b>	<b>0.768</b>		0.396	0.399	5.00	0.533	pCi/L		06/24/24 14:47	1

# Client Sample Results

Client: KPRG and Associates, Inc.  
 Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

**Client Sample ID: MW-11**  
**Date Collected: 05/21/24 13:11**  
**Date Received: 05/22/24 09:55**

**Lab Sample ID: 500-250785-7**  
**Matrix: Water**

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.416</b>		0.226	0.230	1.00	0.287	pCi/L	05/24/24 08:50	06/18/24 23:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		30 - 110					05/24/24 08:50	06/18/24 23:34	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.814</b>		0.371	0.378	1.00	0.489	pCi/L	05/24/24 08:54	06/18/24 11:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		30 - 110					05/24/24 08:54	06/18/24 11:57	1
Y Carrier	80.4		30 - 110					05/24/24 08:54	06/18/24 11:57	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Combined Radium 226 + 228</b>	<b>1.23</b>		0.434	0.442	5.00	0.489	pCi/L		06/24/24 14:47	1

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

**Client Sample ID: MW-14**  
Date Collected: 05/21/24 14:35  
Date Received: 05/22/24 09:55

**Lab Sample ID: 500-250785-8**  
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.429		0.256	0.259	1.00	0.346	pCi/L	05/24/24 08:50	06/18/24 23:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.5		30 - 110					05/24/24 08:50	06/18/24 23:34	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.578	U	0.377	0.379	1.00	0.578	pCi/L	05/24/24 08:54	06/18/24 11:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.5		30 - 110					05/24/24 08:54	06/18/24 11:57	1
Y Carrier	77.4		30 - 110					05/24/24 08:54	06/18/24 11:57	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.910		0.456	0.459	5.00	0.578	pCi/L		06/24/24 14:47	1

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

**Client Sample ID: MW-16**  
Date Collected: 05/21/24 11:54  
Date Received: 05/22/24 09:55

**Lab Sample ID: 500-250785-9**  
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	<0.272	U	0.178	0.179	1.00	0.272	pCi/L	05/24/24 08:50	06/18/24 23:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		30 - 110					05/24/24 08:50	06/18/24 23:34	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.514	U	0.300	0.301	1.00	0.514	pCi/L	05/24/24 08:54	06/18/24 11:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		30 - 110					05/24/24 08:54	06/18/24 11:58	1
Y Carrier	76.6		30 - 110					05/24/24 08:54	06/18/24 11:58	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	<0.514	U	0.349	0.350	5.00	0.514	pCi/L		06/24/24 14:47	1

# Definitions/Glossary

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

## 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 (RAD)

Job ID: 500-250785-2

## Rad

### Prep Batch: 663208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-250785-6	MW-09	Total/NA	Water	PrecSep-21	
500-250785-7	MW-11	Total/NA	Water	PrecSep-21	
500-250785-8	MW-14	Total/NA	Water	PrecSep-21	
500-250785-9	MW-16	Total/NA	Water	PrecSep-21	
MB 160-663208/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-663208/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-250785-8 DU	MW-14	Total/NA	Water	PrecSep-21	

### Prep Batch: 663209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-250785-6	MW-09	Total/NA	Water	PrecSep_0	
500-250785-7	MW-11	Total/NA	Water	PrecSep_0	
500-250785-8	MW-14	Total/NA	Water	PrecSep_0	
500-250785-9	MW-16	Total/NA	Water	PrecSep_0	
MB 160-663209/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-663209/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-250785-8 DU	MW-14	Total/NA	Water	PrecSep_0	

### Prep Batch: 663401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-250785-1	MW-01	Total/NA	Water	PrecSep-21	
500-250785-2	MW-02	Total/NA	Water	PrecSep-21	
500-250785-3	MW-03	Total/NA	Water	PrecSep-21	
500-250785-4	Duplicate	Total/NA	Water	PrecSep-21	
500-250785-5	MW-04	Total/NA	Water	PrecSep-21	
MB 160-663401/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-663401/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

### Prep Batch: 663402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-250785-1	MW-01	Total/NA	Water	PrecSep_0	
500-250785-2	MW-02	Total/NA	Water	PrecSep_0	
500-250785-3	MW-03	Total/NA	Water	PrecSep_0	
500-250785-4	Duplicate	Total/NA	Water	PrecSep_0	
500-250785-5	MW-04	Total/NA	Water	PrecSep_0	
MB 160-663402/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-663402/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	



# QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

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

**Lab Sample ID: MB 160-663208/1-A**  
**Matrix: Water**  
**Analysis Batch: 666754**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 663208**

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	<0.252	U	0.124	0.124	1.00	0.252	pCi/L	05/24/24 08:50	06/18/24 23:41	1
Carrier	MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	MB Qualifier	30 - 110					05/24/24 08:50	06/18/24 23:41	1

**Lab Sample ID: LCS 160-663208/2-A**  
**Matrix: Water**  
**Analysis Batch: 666754**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 663208**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits		
				Uncert. (2σ+/-)							
Radium-226	11.3	9.630		1.22	1.00	0.254	pCi/L	85	75 - 125		
Carrier	LCS	LCS									
Ba Carrier	%Yield	Qualifier	Limits								

**Lab Sample ID: 500-250785-8 DU**  
**Matrix: Water**  
**Analysis Batch: 666753**

**Client Sample ID: MW-14**  
**Prep Type: Total/NA**  
**Prep Batch: 663208**

Analyte	Sample		DU	DU	Total	RL	MDC	Unit	RER	RER Limit	
	Result	Sample Qual	Result	Qual	Uncert. (2σ+/-)						
Radium-226	0.429		<0.345	U	0.234	1.00	0.345	pCi/L	0.30	1	
Carrier	DU	DU									
Ba Carrier	%Yield	Qualifier	Limits								

**Lab Sample ID: MB 160-663401/1-A**  
**Matrix: Water**  
**Analysis Batch: 667487**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 663401**

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	<0.107	U	0.0454	0.0454	1.00	0.107	pCi/L	05/28/24 08:24	06/23/24 11:40	1
Carrier	MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	MB Qualifier	30 - 110					05/28/24 08:24	06/23/24 11:40	1

**Lab Sample ID: LCS 160-663401/2-A**  
**Matrix: Water**  
**Analysis Batch: 667487**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 663401**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	11.51		1.22	1.00	0.109	pCi/L	102	75 - 125

Euromins Chicago

# QC Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

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

**Lab Sample ID: LCS 160-663401/2-A**  
**Matrix: Water**  
**Analysis Batch: 667487**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 663401**

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	92.5	U	30 - 110

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

**Lab Sample ID: MB 160-663209/1-A**  
**Matrix: Water**  
**Analysis Batch: 666755**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 663209**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.424	U	0.271	0.272	1.00	0.424	pCi/L	05/24/24 08:54	06/18/24 11:55	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		30 - 110					05/24/24 08:54	06/18/24 11:55	1
Y Carrier	86.4		30 - 110					05/24/24 08:54	06/18/24 11:55	1

**Lab Sample ID: LCS 160-663209/2-A**  
**Matrix: Water**  
**Analysis Batch: 666755**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 663209**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	8.84	7.870		1.11	1.00	0.495	pCi/L	89	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	97.3		30 - 110						
Y Carrier	83.4		30 - 110						

**Lab Sample ID: 500-250785-8 DU**  
**Matrix: Water**  
**Analysis Batch: 666755**

**Client Sample ID: MW-14**  
**Prep Type: Total/NA**  
**Prep Batch: 663209**

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	<0.578	U	<0.657	U	0.361	1.00	0.657	pCi/L	0.55	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	76.0		30 - 110							
Y Carrier	78.5		30 - 110							

**Lab Sample ID: MB 160-663402/1-A**  
**Matrix: Water**  
**Analysis Batch: 666740**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 663402**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.613	U	0.318	0.318	1.00	0.613	pCi/L	05/28/24 08:30	06/18/24 12:25	1

Eurofins Chicago

# QC Sample Results

Client: KPRG and Associates, Inc.  
 Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

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

**Lab Sample ID: MB 160-663402/1-A**  
**Matrix: Water**  
**Analysis Batch: 666740**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 663402**

Carrier	MB MB		Limits
	%Yield	Qualifier	
Ba Carrier	95.0		30 - 110
Y Carrier	83.0		30 - 110

Prepared	Analyzed	Dil Fac
05/28/24 08:30	06/18/24 12:25	1
05/28/24 08:30	06/18/24 12:25	1


**Lab Sample ID: LCS 160-663402/2-A**  
**Matrix: Water**  
**Analysis Batch: 666740**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 663402**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec
									Limits
Radium-228	8.84	8.850		1.26	1.00	0.627	pCi/L	100	75 - 125

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	92.5		30 - 110
Y Carrier	82.6		30 - 110

### Chain of Custody Record

<b>Client Information</b>		Sampler: <u>Jack Misner</u>	Lab PM: <u>Mockler, Diana J</u>	Carrier Tracking No(s)	COC No. <u>500-123639-44027 1</u>																																																																																																
Client Contact: <u>Jack Misner</u>		Phone: <u>(202)-622-1143</u>	E-Mail: <u>Diana Mockler@et.eurofinsus.com</u>	State of Origin: <u>IL</u>	Page: <u>Page 1 of 1</u>																																																																																																
Company: <u>KPRG and Associates, Inc.</u>		<b>Analysis Requested</b>			Job #: <u>12313, 2</u>																																																																																																
Address: <u>14665 West Lisbon Road, Suite 1A</u>		 500-250785 COC			Preservation Codes: D - HNO3 N - None  <u>500-250785</u>																																																																																																
City: <u>Brookfield</u>						Due Date Requested																																																																																															
State, Zip: <u>WI, 53005</u>						TAT Requested (days)																																																																																															
Phone: <u>262-781-0475(Tel)</u>						Compliance Project <input type="checkbox"/> Yes <input type="checkbox"/> No																																																																																															
Email: <u>mitche@d@kprginc.com</u>						PO #: <u>4502102435</u>																																																																																															
Project Name: <u>Waukegan CCR Event Desc. Quarterly Waukegan CCR</u>						WO #																																																																																															
Site: <u>Illinois</u>		Project #: <u>50011597</u>	Other:																																																																																																		
SSOW#		Matrix (W=water, S=solid, O=wastefoil, BT=Tissue, A=Air) 903.0, 904.0 6010C, 6020A, 7470A 2540C, 4500_F_C, SM4500_Cl_E, SM4500_S04_E 180.1 - Turbidity			Total Number of Containers																																																																																																
<table border="1"> <thead> <tr> <th>Sample Identification</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=comp, G=grab)</th> <th>Matrix</th> <th>903.0, 904.0</th> <th>6010C, 6020A, 7470A</th> <th>2540C, 4500_F_C, SM4500_Cl_E, SM4500_S04_E</th> <th>180.1 - Turbidity</th> </tr> </thead> <tbody> <tr> <td><del>MW-01</del></td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><del>MW-02</del></td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><del>MW-03</del></td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5 MW-04</td> <td>5/21/24</td> <td>0852</td> <td>G</td> <td>Water</td> <td>NU</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>6 MW-09</td> <td></td> <td>1014</td> <td></td> <td>Water</td> <td>NU</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>7 MW-11</td> <td></td> <td>1311</td> <td></td> <td>Water</td> <td>NU</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>8 MW-14</td> <td></td> <td>1435</td> <td></td> <td>Water</td> <td>NU</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>9 MW-16</td> <td>5/21/24</td> <td>1154</td> <td>G</td> <td>Water</td> <td>NU</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td><del>Duplicate</del></td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Sample Identification	Sample Date	Sample Time		Sample Type (C=comp, G=grab)	Matrix	903.0, 904.0	6010C, 6020A, 7470A	2540C, 4500_F_C, SM4500_Cl_E, SM4500_S04_E	180.1 - Turbidity	<del>MW-01</del>				Water					<del>MW-02</del>				Water					<del>MW-03</del>				Water					5 MW-04	5/21/24	0852	G	Water	NU	X	X	X	6 MW-09		1014		Water	NU	X	X	X	7 MW-11		1311		Water	NU	X	X	X	8 MW-14		1435		Water	NU	X	X	X	9 MW-16	5/21/24	1154	G	Water	NU	X	X	X	<del>Duplicate</del>				Water									Water				
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix	903.0, 904.0	6010C, 6020A, 7470A	2540C, 4500_F_C, SM4500_Cl_E, SM4500_S04_E	180.1 - Turbidity																																																																																													
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6 MW-09		1014		Water	NU	X	X	X																																																																																													
7 MW-11		1311		Water	NU	X	X	X																																																																																													
8 MW-14		1435		Water	NU	X	X	X																																																																																													
9 MW-16	5/21/24	1154	G	Water	NU	X	X	X																																																																																													
<del>Duplicate</del>				Water																																																																																																	
				Water																																																																																																	
<b>Possible Hazard Identification</b> <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b> <input type="checkbox"/> Return To Client <input checked="" 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: <u>Jack Misner</u>		Date/Time: <u>5/21/24 1615</u>	Company: <u>KPRG</u>	Received by: <u>FedEx</u> Date/Time: <u>5/21/24 1615</u> Company: <u>FedEx</u>																																																																																																	
Relinquished by:		Date/Time:	Company:	Received by: <u>Stephanie Hernandez</u> Date/Time: <u>5/22/24 0955</u> Company: <u>FEIA</u>																																																																																																	
Relinquished by:		Date/Time:	Company:	Received by:																																																																																																	
Custody Seals Intact. <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: <u>6.2+5.9, 2.8+2.4</u>																																																																																																			

50

ORIGIN ID:FEP (262) 622-1143  
JACK MISNER  
KPRG AND ASSOCIATES  
414 PLAZA DR STE 106  
WESTMONT, IL 60559  
UNITED STATES US

SHIP DATE: 20MAY24  
ACTWGT: 72.60 LB  
CAD: 6994083/SSFE2500  
DIMS: 25x14x14 IN  
BILL THIRD PARTY

Part # 156297435 FRDB2 EXP 10/24  
E3N6/R5D2/FR55

TO **EUROFINS CHICAGO**

**2417 BOND ST**

**UNIVERSITY PARK IL 60484**

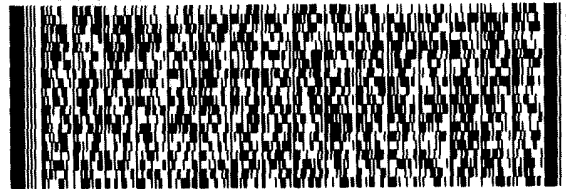


500-250785 Waybi

(666) 666-6666  
INV:  
PO:

REF:

DEPT:



**FedEx**  
Express



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2 of 2

MPS# 2749 0019 1959  
0263

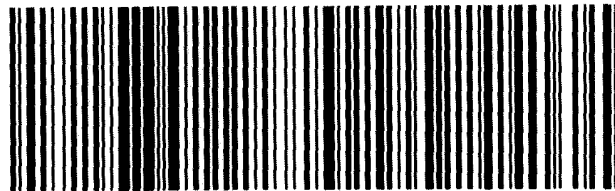
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**79 JOTA**

0201

**TUE - 21 MAY 10:30A**  
**PRIORITY OVERNIGHT**

**AHS**  
**60484**  
**IL-US ORD**



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Do Not Lift Using This Tag



500-250785 Waybi

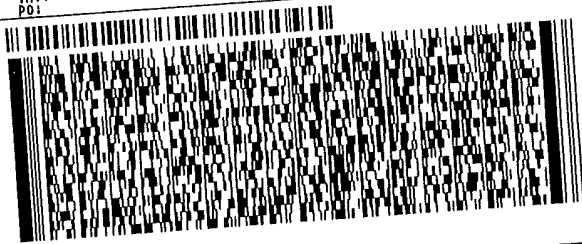
ORIGIN ID: FEPA (262) 622-1143  
JACK MISNER  
KPRG AND ASSOCIATES  
414 PLAZA DR STE 106  
WESTMONT, IL 60559  
UNITED STATES US

SHIP DATE: 21MAY24  
ACTWGT: 60.10 LB  
CAD: 6994083/SSFE2500  
DIMS: 24x14x14 IN  
BILL THIRD PARTY

Part # 156291-335 RR02 Exp 10/24

TO  
EUROFINS CHICAGO  
2417 BOND ST  
UNIVERSITY PARK IL 60484

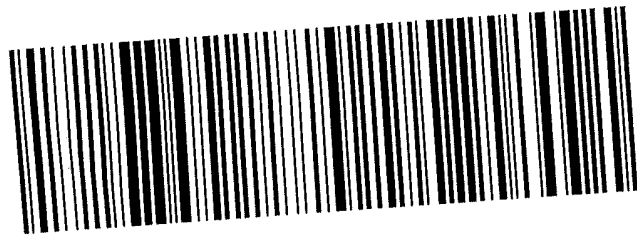
(888) 888-8888 REF: DEPT:



2 of 3  
WED - 22 MAY 10:30A  
PRIORITY OVERNIGHT  
AHS  
60484  
IL-US ORD

MPS# 2749 5320 6396  
0263  
Mstr# 2749 5320 6385

79 JOTA



ORIGIN ID: FEPA (262) 622-1143  
JACK MISNER  
KPRG AND ASSOCIATES  
414 PLAZA DR STE 106  
WESTMONT, IL 60559  
UNITED STATES US

SHIP DATE: 21MAY24  
ACTWGT: 62.95 LB  
CAD: 6994083/SSFE2500  
DIMS: 24x14x14 IN  
BILL THIRD PARTY

Part # 156291-335 RR02 Exp 10/24

TO  
EUROFINS CHICAGO  
2417 BOND ST  
UNIVERSITY PARK IL 60484

(888) 888-8888 REF: DEPT:



1 of 3  
TRK# 2749 5320 6385  
0201  
## MASTER ##

79 JOTA

WED - 22 MAY 10:30A  
PRIORITY OVERNIGHT  
AHS  
60484  
IL-US ORD



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# Chain of Custody Record



Environment Testing



<b>Client Information (Sub Contract Lab)</b>			Lab PM: Mockler, Diana J			Carrier Tracking No(s): 500-188570-1		
Client Contact: Shipping/Receiving			E-Mail: Diana.Mockler@et.eurofins.com			Page: Page 1 of 1		
Company: Test/America Laboratories, Inc.			Accreditations Required (See note): NELAP - Illinois			Job #: 500-250785-2		
Address: 13715 Rider Trail North, Earth City, MO, 63045			Due Date Requested: 6/24/2024			State of Origin: Illinois		
Phone: 314-298-8566(Tel) 314-298-8757(Fax)			TAT Requested (days):			Preservation Codes:		
Email:			PO #:			Analysis Requested:		
Project Name: Waukegan CCR (RAD)			WO #:			Total Number of containers		
Site: NRG Midwest Generation Waukegan			Project #: 50011597			Other:		
SSOW#:			Field Filtered Sample (Yes or No)			Special Instructions/Note:		
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Wewater, Sewage, Onwastebiol, BT-Tissue, AAir)	Preservation Code:	903 O/PrecSep_21 Standard Target List	904 O/PrecSep_0 Standard Target List	Ra226Ra228_GFPc
MW-01 (500-250785-1)	5/20/24	10:48 Central		Water		X	X	3
MW-02 (500-250785-2)	5/20/24	12:14 Central		Water		X	X	3
MW-03 (500-250785-3)	5/20/24	13:59 Central		Water		X	X	3
Duplicate (500-250785-4)	5/20/24	Central		Water		X	X	3
Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Chicago attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago.								
<b>Possible Hazard Identification</b>								
Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months								
Special Instructions/QC Requirements:								
Empty Kit Relinquished by:			Date/Time: 5/21/24 1330			Method of Shipment:		
Relinquished by:			Date/Time:			Received by: Richard Thornley		
Relinquished by:			Date/Time:			Date/Time: MAY 22 2024 0830		
Relinquished by:			Date/Time:			Date/Time:		
Custody Seals Intact: Δ Yes Δ No			Custody Seal No.:			Company: EPA STC		



**Chain of Custody Record**



<b>Client Information (Sub Contract Lab)</b>		Lab PM Mockler, Diana J	Carrier Tracking No(s) 500-188654-1
Client Contact Shipping/Receiving		E-Mail Diana.Mockler@et.eurofins.com	Page Page 1 of 1
Company TestAmerica Laboratories, Inc.		State of Origin Illinois	Job # 500-250785-2
Address 13715 Rider Trail North,		Preservation Codes:	
City Earth City	Due Date Requested: 6/5/2024		
State, Zip MO, 63045	TAT Requested (days):		
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #		
Email:	WO #		
Project Name Waukegan CCR (RAD)	Project # 50011597		
Site NRG Midwest Generation Waukegan	SSOW#		

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewat, B=Tissue, A=Air)	Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		904.0/PreSep_0 Standard Target List		904.0/PreSep_21 Standard Target List		Total Number of Containers	Special Instructions/Note:
					Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	904.0/PreSep_0 Standard Target List	904.0/PreSep_21 Standard Target List	904.0/PreSep_0 Standard Target List	904.0/PreSep_21 Standard Target List				
MW-04 (500-250785-5)	5/21/24	08:52 Central		Water			X	X	X	X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume.
MW-09 (500-250785-6)	5/21/24	10:14 Central		Water			X	X	X	X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume.
MW-11 (500-250785-7)	5/21/24	13:11 Central		Water			X	X	X	X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume.
MW-14 (500-250785-8)	5/21/24	14:35 Central		Water			X	X	X	X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume.
MW-16 (500-250785-9)	5/21/24	11:54 Central		Water			X	X	X	X	X	X	3	Batch QC must be performed (dup, spikes, etc) - no NCMs concerning limited volume.

Other:

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

Special Instructions/QC Requirements:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)  
 Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months

Empty Kit Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_

Relinquished by: *Alvin Smith* Date/Time: *5/21/24 1630* Company: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Custody Seals Intact:  Yes  No  Custody Seal No.: \_\_\_\_\_

Received by: *Sena Worthington* Date/Time: *MAY 23 2024 0850* Company: *EPSON*

Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Cooler Temperature(s) °C and Other Remarks:



# Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-250785-2

**Login Number: 250785**

**List Number: 1**

**Creator: Scott, Sherri L**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9,5.9,2.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-250785-2

**Login Number: 250785**

**List Number: 2**

**Creator: Thornley, Richard W**

**List Source: Eurofins St. Louis**

**List Creation: 05/22/24 03:15 PM**

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

# Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-250785-2

**Login Number: 250785**

**List Number: 3**

**Creator: Worthington, Sierra M**

**List Source: Eurofins St. Louis**

**List Creation: 05/23/24 03:25 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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Lab Chronicle

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

**Client Sample ID: MW-01**  
**Date Collected: 05/20/24 10:48**  
**Date Received: 05/21/24 09:50**

**Lab Sample ID: 500-250785-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			663401	MLT	EET SL	05/28/24 08:24
Total/NA	Analysis	903.0		1	667487	SCB	EET SL	06/23/24 11:40
Total/NA	Prep	PrecSep_0			663402	MLT	EET SL	05/28/24 08:30
Total/NA	Analysis	904.0		1	666740	SWS	EET SL	06/18/24 12:26
Total/NA	Analysis	Ra226_Ra228		1	667771	EMH	EET SL	06/24/24 14:47

**Client Sample ID: MW-02**  
**Date Collected: 05/20/24 12:14**  
**Date Received: 05/21/24 09:50**

**Lab Sample ID: 500-250785-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			663401	MLT	EET SL	05/28/24 08:24
Total/NA	Analysis	903.0		1	667487	SCB	EET SL	06/23/24 11:41
Total/NA	Prep	PrecSep_0			663402	MLT	EET SL	05/28/24 08:30
Total/NA	Analysis	904.0		1	666740	SWS	EET SL	06/18/24 12:26
Total/NA	Analysis	Ra226_Ra228		1	667771	EMH	EET SL	06/24/24 14:47

**Client Sample ID: MW-03**  
**Date Collected: 05/20/24 13:59**  
**Date Received: 05/21/24 09:50**

**Lab Sample ID: 500-250785-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			663401	MLT	EET SL	05/28/24 08:24
Total/NA	Analysis	903.0		1	667487	SCB	EET SL	06/23/24 11:41
Total/NA	Prep	PrecSep_0			663402	MLT	EET SL	05/28/24 08:30
Total/NA	Analysis	904.0		1	666740	SWS	EET SL	06/18/24 12:26
Total/NA	Analysis	Ra226_Ra228		1	667771	EMH	EET SL	06/24/24 14:47

**Client Sample ID: Duplicate**  
**Date Collected: 05/20/24 00:00**  
**Date Received: 05/21/24 09:50**

**Lab Sample ID: 500-250785-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			663401	MLT	EET SL	05/28/24 08:24
Total/NA	Analysis	903.0		1	667487	SCB	EET SL	06/23/24 11:41
Total/NA	Prep	PrecSep_0			663402	MLT	EET SL	05/28/24 08:30
Total/NA	Analysis	904.0		1	666740	SWS	EET SL	06/18/24 12:30
Total/NA	Analysis	Ra226_Ra228		1	667771	EMH	EET SL	06/24/24 14:47

# Lab Chronicle

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

**Client Sample ID: MW-04**  
**Date Collected: 05/21/24 08:52**  
**Date Received: 05/22/24 09:55**

**Lab Sample ID: 500-250785-5**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			663401	MLT	EET SL	05/28/24 08:24
Total/NA	Analysis	903.0		1	667487	SCB	EET SL	06/23/24 11:41
Total/NA	Prep	PrecSep_0			663402	MLT	EET SL	05/28/24 08:30
Total/NA	Analysis	904.0		1	666740	SWS	EET SL	06/18/24 12:31
Total/NA	Analysis	Ra226_Ra228		1	667771	EMH	EET SL	06/24/24 14:47

**Client Sample ID: MW-09**  
**Date Collected: 05/21/24 10:14**  
**Date Received: 05/22/24 09:55**

**Lab Sample ID: 500-250785-6**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			663208	MLT	EET SL	05/24/24 08:50
Total/NA	Analysis	903.0		1	666753	SCB	EET SL	06/18/24 23:34
Total/NA	Prep	PrecSep_0			663209	MLT	EET SL	05/24/24 08:54
Total/NA	Analysis	904.0		1	666755	SCB	EET SL	06/18/24 11:57
Total/NA	Analysis	Ra226_Ra228		1	667771	EMH	EET SL	06/24/24 14:47

**Client Sample ID: MW-11**  
**Date Collected: 05/21/24 13:11**  
**Date Received: 05/22/24 09:55**

**Lab Sample ID: 500-250785-7**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			663208	MLT	EET SL	05/24/24 08:50
Total/NA	Analysis	903.0		1	666753	SCB	EET SL	06/18/24 23:34
Total/NA	Prep	PrecSep_0			663209	MLT	EET SL	05/24/24 08:54
Total/NA	Analysis	904.0		1	666755	SCB	EET SL	06/18/24 11:57
Total/NA	Analysis	Ra226_Ra228		1	667771	EMH	EET SL	06/24/24 14:47

**Client Sample ID: MW-14**  
**Date Collected: 05/21/24 14:35**  
**Date Received: 05/22/24 09:55**

**Lab Sample ID: 500-250785-8**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			663208	MLT	EET SL	05/24/24 08:50
Total/NA	Analysis	903.0		1	666753	SCB	EET SL	06/18/24 23:34
Total/NA	Prep	PrecSep_0			663209	MLT	EET SL	05/24/24 08:54
Total/NA	Analysis	904.0		1	666755	SCB	EET SL	06/18/24 11:57
Total/NA	Analysis	Ra226_Ra228		1	667771	EMH	EET SL	06/24/24 14:47

# Lab Chronicle

Client: KPRG and Associates, Inc.  
Project/Site: Waukegan CCR (RAD)

Job ID: 500-250785-2

**Client Sample ID: MW-16**  
**Date Collected: 05/21/24 11:54**  
**Date Received: 05/22/24 09:55**

**Lab Sample ID: 500-250785-9**  
**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>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	PrecSep-21			663208	MLT	EET SL	05/24/24 08:50
Total/NA	Analysis	903.0		1	666753	SCB	EET SL	06/18/24 23:34
Total/NA	Prep	PrecSep_0			663209	MLT	EET SL	05/24/24 08:54
Total/NA	Analysis	904.0		1	666755	SCB	EET SL	06/18/24 11:58
Total/NA	Analysis	Ra226_Ra228		1	667771	EMH	EET SL	06/24/24 14:47

**Laboratory References:**

EET 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 (RAD)

Job ID: 500-250785-2

## Laboratory: Eurofins St. Louis

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	200023	11-30-24

- 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 (RAD)

Job ID: 500-250785-2

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

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
500-250785-1	MW-01	90.0	
500-250785-2	MW-02	94.0	
500-250785-3	MW-03	86.5	
500-250785-4	Duplicate	88.0	
500-250785-5	MW-04	89.0	
500-250785-6	MW-09	98.5	
500-250785-7	MW-11	95.3	
500-250785-8	MW-14	84.5	
500-250785-8 DU	MW-14	76.0	
500-250785-9	MW-16	97.3	
LCS 160-663208/2-A	Lab Control Sample	97.3	
LCS 160-663401/2-A	Lab Control Sample	92.5	
MB 160-663208/1-A	Method Blank	93.5	
MB 160-663401/1-A	Method Blank	95.0	
<b>Tracer/Carrier Legend</b>			
Ba = Ba Carrier			

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

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
500-250785-1	MW-01	90.0	86.4
500-250785-2	MW-02	94.0	85.6
500-250785-3	MW-03	86.5	86.0
500-250785-4	Duplicate	88.0	81.1
500-250785-5	MW-04	89.0	85.2
500-250785-6	MW-09	98.5	75.9
500-250785-7	MW-11	95.3	80.4
500-250785-8	MW-14	84.5	77.4
500-250785-8 DU	MW-14	76.0	78.5
500-250785-9	MW-16	97.3	76.6
LCS 160-663209/2-A	Lab Control Sample	97.3	83.4
LCS 160-663402/2-A	Lab Control Sample	92.5	82.6
MB 160-663209/1-A	Method Blank	93.5	86.4
MB 160-663402/1-A	Method Blank	95.0	83.0
<b>Tracer/Carrier Legend</b>			
Ba = Ba Carrier			
Y = Y Carrier			



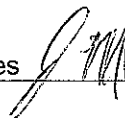
PROJECT NAME	12313.2 - NRG - Waukegan Station		DATE	5/20/24
Sample Name	MW-01	Start Time	1048	
Condition of Well	Good			
Water Level	21.55	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low flow bladder	Purge Characteristics	Clear	
Volume Removed	10 qt	WL at Sample Time	21.55	
Method of Sample	Low flow bladder	Sample Characteristics	Clear	
Sample Analysis	Permit, CCR	Sample Time	1119	
Water Quality Meter	YSI			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
1051	21.55	6.55	13.5	.632	8.90	142.3	5.06
1054	-	7.10	13.2	1.135	5.92	136.2	5.16
1057	-	7.35	13.3	1.117	4.33	118.6	5.44
1100	-	7.44	13.3	1.093	3.51	95.7	5.25
1103	-	7.49	13.3	1.069	3.04	59.0	5.63
1106	-	7.53	13.3	1.020	2.64	17.5	5.25
1109	-	7.56	13.2	.985	2.36	-10.6	4.79
1112	-	7.57	13.2	.968	2.16	-25.0	5.00
1115	-	7.57	13.2	.956	2.09	-30.8	4.72

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates



PROJECT NAME	12313.2 - NRG - Waukegan Station		DATE	5/20/24
Sample Name	MW-02	Start Time	1157	
Condition of Well	Good			
Water Level	21.40	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low flow bladder	Purge Characteristics	Clear / Slightly Cloudy	
Volume Removed	5 gal	WL at Sample Time	21.40	
Method of Sample	Low flow bladder	Sample Characteristics	Clear	
Sample Analysis	Permit, CCR	Sample Time	1214	
Water Quality Meter	YSI			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
1201	21.40	7.34	13.1	0.795	8.78	-35.1	6.89
1204	-	7.05	13.1	1.241	6.53	2.1	18.36
1207	-	7.02	12.8	1.253	4.77	14.6	11.77
1210	-	7.02	12.7	1.251	4.02	17.7	8.91

SAMPLING NOTES:

Stop ~~sample~~ between readings & sample collection due to groundwater

Sampler Name and Company:

KPRG and Associates

PROJECT NAME	12313.2 - NRG - Waukegan Station		DATE	5/20/24
Sample Name	MW-03	Start Time	1335	
Condition of Well	Good			
Water Level	21.63	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low flow bladder	Purge Characteristics	Clear	
Volume Removed	Pat	WL at Sample Time	21.63	
Method of Sample	Low flow bladder	Sample Characteristics		
Sample Analysis	Permit, CCR	Sample Time	1359	
Water Quality Meter	YSI			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
1339	21.63	7.70	13.0	.609	9.18	69.2	5.93
1342	-	10.26	13.0	.622	6.01	-61.7	9.04
1345	-	10.39	12.9	.623	4.50	-89.4	6.69
1348	-	10.24	12.9	.639	3.75	-102.9	6.25
1351	-	10.07	12.9	.654	3.23	-114.1	6.03
1354	-	9.94	12.9	.669	2.89	-121.0	6.09

SAMPLING NOTES: Stopped between readings & sampling again for thunderstorm

CCR Duplicate

Sampler Name and Company:

KPRG and Associates *[Signature]*

PROJECT NAME	12313.2 – NRG - Waukegan Station		DATE	5/21/24
Sample Name	MW-04	Start Time	0833	
Condition of Well	Good			
Water Level	21.07	Total Depth	-	
Well Diameter	PVC – 2 inch	Volume in Well	-	
Method of Purge	Low flow bladder	Purge Characteristics	Clear	
Volume Removed	6.5 gal	WL at Sample Time	21.10	
Method of Sample	Low flow bladder	Sample Characteristics	Clear	
Sample Analysis	Permit CCR	Sample Time	0852	
Water Quality Meter	YSI			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
0837	21.07	7.75	12.3	.521	8.45	-29.0	6.75
0840	-	8.23	12.2	.465	5.35	-23.1	6.33
0843	-	8.19	12.1	.485	4.01	-20.3	5.75
0846	-	7.94	12.1	.511	3.58	-16.4	5.61
0849	-	7.59	12.1	.550	3.07	-9.0	5.67

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates



PROJECT NAME	12313.2 - NRG - Waukegan Station		DATE	5/21/24
Sample Name	MW-09	Start Time	0955	
Condition of Well	Good			
Water Level	10.48	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low flow bladder	Purge Characteristics	Cloudy Brown/Orange	
Volume Removed	2qt	WL at Sample Time	10.48	
Method of Sample	Low flow bladder	Sample Characteristics	Slightly Cloudy Brown	
Sample Analysis	Permit, CCR	Sample Time	1014	
Water Quality Meter	YSI			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
0958	10.48	7.45	14.3	1.423	9.11	110.5	141.70
1001	-	7.09	13.1	1.301	5.45	-111.7	284.44
1004	-	7.10	12.9	1.291	4.32	-122.7	197.43
1007	-	7.11	12.7	1.294	3.62	-127.7	144.53
1010	-	7.12	12.6	1.294	3.09	-130.8	105.62

SAMPLING NOTES:

Duplicate Permit

Sampler Name and Company:

KPRG and Associates



PROJECT NAME	12313.2 - NRG - Waukegan Station		DATE	5/21/24
Sample Name	MW-11	Start Time	1251	
Condition of Well	Good			
Water Level	6.13	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low flow bladder	Purge Characteristics	Clear	
Volume Removed	3 gal	WL at Sample Time	6.13	
Method of Sample	Low flow bladder	Sample Characteristics		
Sample Analysis	ELUC Permit, CCR	Sample Time	1311	
Water Quality Meter	YSI			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
1255	6.13	7.08	12.7	1.237	7.54	-46.5	14.55
1258	-	6.91	11.8	1.280	4.94	-84.7	8.05
1301	-	6.90	11.9	1.277	3.97	-92.8	6.51
1304	-	6.90	11.8	1.279	3.35	-97.3	6.34
1307	-	6.90	11.9	1.275	2.87	-100.7	6.08

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates



PROJECT NAME	12313.2 - NRG - Waukegan Station		DATE	5/21/24
Sample Name	MW-14	Start Time	1414	
Condition of Well	Good			
Water Level	5.05	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low flow bladder	Purge Characteristics	Slightly Cloudy Brown	
Volume Removed	3qt	WL at Sample Time	5.05	
Method of Sample	Low flow bladder	Sample Characteristics	Slightly Cloudy Brown	
Sample Analysis	Elve Permit, CCR	Sample Time	1435	
Water Quality Meter	YSI			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
1416	5.05	7.50	13.5	.763	8.45	97.6	79.05
1419	-	7.08	12.3	.656	6.07	27.0	149.78
1422	-	6.98	12.3	.639	4.69	-12.7	70.78
1425	-	6.97	12.3	.636	4.07	-20.6	38.11
1428	-	6.96	12.2	.636	3.52	-25.0	38.82
1431	-	6.95	12.1	.639	3.26	-26.4	38.51

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

PROJECT NAME	12313.2 – NRG - Waukegan Station		DATE	5/21/24
Sample Name	MW-16	Start Time	1131	
Condition of Well	Good			
Water Level	25.52	Total Depth	-	
Well Diameter	PVC – 2 inch	Volume in Well	-	
Method of Purge	Low flow bladder	Purge Characteristics	Slightly Cloudy	
Volume Removed	4qt	WL at Sample Time	25.52	
Method of Sample	Low flow bladder	Sample Characteristics		
Sample Analysis	CCR	Sample Time	1154	
Water Quality Meter	YS1			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
1135	25.52	7.00	14.7	1.080	8.12	117.9	53.87
1138	-	6.89	14.3	1.210	5.17	114.0	100.58
1141	-	6.94	14.2	1.188	3.93	104.4	53.82
1144	-	6.95	14.4	1.181	3.31	95.1	21.35
1147	-	6.95	14.3	1.176	2.89	83.2	14.71
1150	-	6.95	14.3	1.171	2.60	68.7	10.82
1153	-	6.96	14.1	1.170	2.38	53.8	12.65
1156	-	6.95	14.2	1.169	2.19	38.6	10.71
1159	-	6.95	14.1	1.171	2.11	33.4	9.87

SAMPLING NOTES:

Don't change sample time on bottles  
Actual samples collected at 1203

Sampler Name and Company:

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