

## **DATA SUMMARY POSTING**

Station: Midwest Generation Powerton Generating Station

Regulated Unit(s): Former Ash Basin (IEPA ID No. W1798010008-05)

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

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

Table 1. Groundwater Analytical Results - Midwest Generation, LLC, Powerton Station, Pekin, IL, Former Ash Basin.

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228 Combined	Selenium	Thallium	
MW-01 up-gradient	11/16/2015	1.0	98	44	0.17	7.07	93	530	< 0.003	< 0.001	0.057	^ < 0.001	< 0.0005	< 0.005	< 0.001	* < 0.0005	< 0.01	< 0.0002	< 0.0050	0.744	< 0.0025	* < 0.002	
	2/25/2016	0.2	110	42	0.16	7.23	54	460	< 0.003	0.0025	0.053	< 0.001	< 0.0005	< 0.005	0.0014	0.0019	< 0.01	< 0.0002	< 0.005	< 0.722	0.0029	< 0.002	
	5/20/2016	0.34	100	44	0.17	6.95	65	430	< 0.003	0.0081	0.062	< 0.001	< 0.0005	0.007	0.0053	0.011	< 0.01	< 0.0002	< 0.005	< 0.953	< 0.0025	< 0.002	
	8/17/2016	0.27	78	39	0.25	7.16	50	530	< 0.003	0.0014	0.048	< 0.001	< 0.0005	< 0.005	< 0.001	0.0014	< 0.01	< 0.0002	0.0057	< 0.491	< 0.0025	< 0.002	
	11/16/2016	0.18	97	39	0.21	7.22	32	500	< 0.003	0.0051	0.056	< 0.001	< 0.0005	< 0.005	0.0044	0.0082	< 0.01	< 0.0002	0.0059	< 0.618	< 0.0025	< 0.002	
	2/14/2017	0.18	120	55	0.17	7.30	60	550	< 0.003	0.0041	0.056	< 0.001	< 0.0005	< 0.005	0.0045	0.0076	< 0.01	< 0.0002	0.0056	< 0.837	< 0.0025	< 0.002	
	5/3/2017	0.19	86	66	0.16	7.41	45	460	< 0.003	0.0015	0.045	< 0.001	< 0.0005	< 0.005	0.0033	0.0067	< 0.01	< 0.0002	< 0.005	0.574	< 0.0025	< 0.002	
	6/21/2017	0.18	85	58	0.18	7.60	47	540	< 0.003	< 0.001	0.040	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0061	< 0.418	< 0.0025	< 0.002	
	8/25/2017	0.56	86	41	0.18	7.41	63	490	< 0.003	< 0.001	0.049	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0059	< 0.775	< 0.0025	< 0.002	
	11/8/2017	0.57	130	38	0.12	6.69	61	640	< 0.003	< 0.001	0.083	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	0.343	< 0.0025	< 0.002	
	5/17/2018	0.15	88	50	0.12	6.70	48	540	< 0.003	< 0.001	0.045	< 0.001	< 0.0005	< 0.005	< 0.001	0.00068	< 0.01	< 0.0002	< 0.005	< 0.396	< 0.0025	< 0.002	
	8/8/2018	0.14	86	48	0.13	6.80	43	430	< 0.003	< 0.001	0.051	< ^ 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	0.579	< 0.0025	< 0.002	
	4/30/2019	0.07	78	54	0.17	7.20	27	450	< 0.003	0.0014	0.039	< 0.001	< 0.0005	< 0.005	< 0.001	0.0017	< 0.01	< 0.0002	< 0.005	< 0.656	< 0.0025	< 0.002	
	8/26/2019	0.57	100	39	0.13	7.15	71	550	< 0.003	< 0.001	0.053	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	0.802	< 0.0025	< 0.002	
	2/24/2020	0.28	87	53	0.21	7.19	34	410	< 0.003	< 0.001	0.044	< ^ 0.001	< 0.0005	< 0.005	< 0.001	0.00057	< 0.01	< 0.0002	< 0.005	< 0.478	< 0.0025	< 0.002	
	4/28/2020	0.33	110	46	0.19	7.17	41	470	NA	< 0.001	0.051	NA	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	0.628	< 0.0025	< 0.002	
	12/7/2020	0.59	100	54	0.25	7.22	55	640	NA	< 0.001	0.058	NA	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0052	< 0.542	< 0.0025	< 0.002	
	5/11/2021	0.21	85	51	0.21	7.52	37	450	< 0.003	< 0.001	0.043	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.01	0.521	< 0.0025	< 0.002	
	8/24/2021	0.27	99	40	0.18	7.19	56	430	< 0.003	< 0.001	0.061	< 0.001	< 0.0005	< 0.005	< 0.001	0.00088	< 0.01	< 0.0002	0.007	< 0.463	< 0.0025	< 0.002	
	11/30/2021	0.35	84	41	0.19	7.14	28	410	< 0.003	< 0.001	0.06	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.005	< 0.0002	0.0072	< 0.434	0.0026	< 0.002	
	2/9/2022	0.18	96	47	0.17	7.33	48	520	< 0.003	0.0017	0.052	< 0.001	< 0.0005	< 0.005	< 0.001	0.0012	0.003	< 0.0002	0.0074	< 0.527	< 0.0025	< 0.002	
	6/7/2022	0.21	81	51	0.14	7.62	27	430	< 0.003	< 0.001	0.04	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0057	0.531	< 0.0025	< 0.002	
8/30/2022	0.59	92	44	0.15	7.10	66	810	< 0.003	< 0.001	0.073	< ^+ 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< ^+ 0.01	< 0.0002	< 0.005	< 0.441	< 0.0025	< 0.002		
11/15/2022	0.74	110	47	0.1	7.15	45	530	< 0.003	< 0.001	0.086	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	0.659	< 0.0025	< 0.002		
2/22/2023	0.46	110	52	0.14	7.51	92	500	< 0.0030	< 0.0010	0.082	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	< 0.010	< 0.00020	< 0.0050	< 0.503	< 0.0025	< 0.0020		
MW-10 up-gradient	6/22/2017	0.46	100	48	0.19	6.81	54	1.0	< 0.003	0.0023	0.250	< 0.005	< 0.005	0.008	0.003	< 0.01	< 0.0002	< 0.005	0.408	0.0042	< 0.002		
	8/24/2017	0.32	93	51	0.18	7.14	57	480	< 0.003	0.0020	0.220	< 0.001	< 0.0005	< 0.005	0.007	0.003	< 0.01	< 0.0002	< 0.005	0.564	0.0044	< 0.002	
	11/9/2017	0.36	98	48	0.18	6.78	64	500	< 0.003	< 0.0010	0.220	< 0.001	< 0.0005	< 0.005	0.004	< 0.001	< 0.01	< 0.0002	< 0.005	1.020	0.0034	< 0.002	
	5/16/2018	0.42	93	44	0.19	7.64	80	530	< 0.003	0.0010	0.220	< 0.001	< 0.0005	< 0.005	0.021	0.001	< 0.01	< 0.0002	< 0.005	1.550	0.0050	< 0.002	
	8/8/2018	0.39	99	58	0.19	7.10	60	550	< 0.003	0.0012	0.220	< ^ 0.001	< 0.0005	< 0.005	0.014	0.001	< 0.01	< 0.0002	< 0.005	< 0.551	0.0062	< 0.002	
	10/30/2018	0.34	110	49	0.22	7.65	49	510	< 0.003	0.0110	0.410	< 0.001	0.0008	0.024	0.047	0.023	0.02	< 0.0002	< 0.005	3.00	0.0046	< 0.002	
	2/26/2019	0.39	150	48	0.21	6.77	36	540	< 0.003	0.0220	0.590	< 0.005	0.0015	0.063	0.081	0.036	0.03	< 0.0002	0.007	4.130	0.0041	< 0.002	
	5/1/2019	0.35	92	50	0.22	6.81	30	470	< 0.003	0.0023	0.270	< 0.001	< 0.0005	< 0.005	0.011	0.0028	< 0.01	< 0.0002	< 0.005	1.330	0.0037	< 0.002	
	8/26/2019	0.30	84	48	0.19	7.09	30	410	< 0.003	0.0017	0.190	< 0.001	< 0.001	< 0.005	0.007	0.0016	< 0.01	< 0.0002	< 0.005	1.540	0.0050	< 0.002	
	2/25/2020	1.40	110	45	0.23	6.82	59	500	< 0.003	0.0033	0.280	< ^ 0.001	< 0.0005	0.0086	0.011	0.0046	< 0.01	< 0.0002	< 0.005	1.07	0.0058	< 0.002	
	4/28/2020	1.00	110	41	0.24	6.80	64	550	NA	0.0022	0.250	NA	NA	< 0.005	0.0065	0.0017	NA	NA	< 0.005	0.639	0.0054	NA	
	12/8/2020	2.40	120	44	0.26	7.11	71	550	NA	0.0015	0.280	NA	NA	< 0.005	0.0089	0.0023	NA	< 0.0002	< 0.005	1.76	0.0031	NA	
	5/11/2021	0.64	100	52	0.24	7.01	59	540	< 0.003	0.0011	0.260	< 0.001	< 0.0005	< 0.005	0.008	0.00085	< 0.01	< 0.0002	< 0.005	1.42	0.0049	< 0.002	
	8/24/2021	0.42	98	53	0.21	6.87	46	420	< 0.003	0.0017	0.24	< 0.001	< 0.0005	< 0.005	0.0082	0.002	< 0.01	< 0.0002	< 0.005	0.638	0.0051	< 0.002	
	11/30/2021	0.42	100	47	0.19	6.99	36	530	< 0.003	0.0015	0.2	< 0.001	< 0.0005	< 0.005	0.0037	0.00051	0.0031	< 0.0002	< 0.005	1.39	< 0.0025	< 0.002	
	2/9/2022	0.41	94	48	0.22	6.88	50	530	< 0.003	0.011	0.6	< 0.001	0.00064	0.026	0.054	0.021	0.011	< 0.0002	< 0.005	6.51	< 0.0045	< 0.002	
	3/29/22 (R)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.811	NS	NS
	6/7/2022	0.43	85	44	0.21	7.09	38	390	< 0.003	0.0011	0.18	< 0.001	< 0.0005	< 0.005	0.0028	< 0.0005	< 0.01	< 0.0002	< 0.005	0.687	0.0049	< 0.002	
	8/30/2022	0.38	92	45	0.22	6.83	38	590	< 0.003	0.0012	0.24	< ^+ 0.001	< 0.0005	< 0.005	0.0086	0.00074	< ^+ 0.01	< 0.0002	< 0.005	1.4	< 0.0025	< 0.002	
	11/15/2022	0.44	99	49	0.28	7.03	48	470	< 0.003	< 0.001	0.2	< 0.001	< 0.0005	< 0.005	0.0052	< 0.0005	< 0.01	< 0.0002	< 0.005	0.909	< 0.0025	<	

Table 1. Groundwater Analytical Results - Midwest Generation, LLC, Powerton Station, Pekin, IL, Former Ash Basin.

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-03 down-gradient	6/20/2017	0.4	76	54	0.29	7.26	49	480	< 0.003	0.0013	0.066	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.325	< 0.0025	< 0.002
	8/23/2017	0.40	79	52	0.28	7.44	52	430	< 0.003	0.0010	0.066	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	1.200	< 0.0025	< 0.002
	11/7/2017	0.31	79	62	0.26	7.04	61	460	< 0.003	0.0013	0.068	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	0.588	< 0.0025	< 0.002
	5/15/2018	0.35	87	66	0.27	7.53	77	520	< 0.003	0.0010	0.059	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.489	< 0.0025	< 0.002
	8/7/2018	0.40	82	67	0.22	6.60	49	500	< 0.003	0.0015	0.067	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.341	< 0.0025	< 0.002
	10/30/2018	0.20	74	44	0.25	7.84	26	400	< 0.003	0.0014	0.056	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.354	< 0.0025	< 0.002
	2/26/2019	0.06	74	56	0.24	7.49	25	410	< 0.003	0.0013	0.054	< 0.001	< 0.0005	< 0.005	< 0.001	0.0007	< 0.01	< 0.0002	< 0.005	< 0.399	< 0.0025	< 0.002
	4/30/2019	0.28	74	49	0.22	7.17	38	390	< 0.003	< 0.001	0.060	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.668	< 0.0025	< 0.002
	8/26/2019	0.31	75	50	0.26	7.17	14	380	< 0.003	0.0014	0.069	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.444	< 0.0025	< 0.002
	2/24/2020	0.33	87	53	0.22	7.10	65	470	< 0.003	< 0.001	0.066	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.400	< 0.0025	< 0.002
	4/28/2020	0.24	86	46	0.22	7.03	79	410	NA	0.0013	0.066	NA	NA	< 0.005	< 0.001	< 0.0005	NA	NA	< 0.005	< 0.498	0.0036	NA
	12/9/2020	0.86	92	45	0.28	7.46	60	390	NA	< 0.001	0.086	NA	NA	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.432	< 0.0025	NA
	5/11/2021	0.22	75	49	0.21	7.33	38	390	< 0.003	< 0.001	0.07	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.519	< 0.0025	< 0.002
	8/24/2021	0.41	81	46	0.25	7.15	32	310	< 0.003	0.0012	0.072	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.444	< 0.0025	< 0.002
	11/30/2021	0.3	76	47	0.26	7.20	23	350	< 0.003	0.0014	0.063	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.004	< 0.0002	< 0.005	< 0.436	< 0.0025	< 0.002
	2/8/2022	0.2	94	47	0.21	7.22	50	550	< 0.003	0.001	0.058	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.003	< 0.0002	< 0.005	0.593	< 0.0025	< 0.002
	6/7/2022	0.37	79	45	0.22	7.37	47	370	< 0.003	0.0012	0.064	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	0.851	< 0.0025	< 0.002
	8/30/2022	0.57	87	50	0.21	7.10	51	710	< 0.003	< 0.001	0.1	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	0.589	< 0.0025	< 0.002
11/14/2022	0.42	81	49	0.28	7.23	44	430	< 0.003	< 0.001	0.11	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.54	< 0.0025	< 0.002	
2/21/2023	1.0	96	53	0.20	7.75	70	550	< 0.0030	< 0.0010	0.11	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	< 0.010	< 0.00020	< 0.0050	< 0.493	< 0.0025	< 0.0020	
MW-04 down-gradient	6/20/2017	0.5	77	55	0.29	7.45	53	480	< 0.003	< 0.001	0.0025	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.343	< 0.0025	< 0.002
	8/28/2017	V	73	89	0.33	7.13	110	680	< 0.003	< 0.001	0.028	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.013	< 0.246	< 0.0025	< 0.002
	11/7/2017	0.60	110	94	0.24	6.80	130	650	< 0.003	< 0.001	0.051	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.332	0.0092	< 0.002
	5/15/2018	0.68	87	66	0.27	7.63	100	630	< 0.003	< 0.001	0.037	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	0.661	< 0.0025	< 0.002
	8/7/2018	0.79	84	71	0.32	6.72	49	510	< 0.003	0.0011	0.031	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.006	< 0.334	< 0.0025	< 0.002
	10/30/2018	0.54	100	80	0.24	7.55	91	690	< 0.003	< 0.001	0.049	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	0.423	< 0.0025	< 0.002
	2/26/2019	0.38	79	55	0.25	7.18	52	490	< 0.003	0.0013	0.033	< 0.001	< 0.0005	< 0.005	0.001	0.0012	< 0.01	< 0.0002	< 0.005	0.366	< 0.0025	< 0.002
	4/30/2019	0.36	74	48	0.25	7.08	35	380	< 0.003	< 0.001	0.026	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.684	< 0.0025	< 0.002
	8/26/2019	0.64	91	60	0.24	7.08	14	490	< 0.003	< 0.001	0.032	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.008	1.090	< 0.0025	< 0.002
	2/24/2020	0.34	81	49	0.20	7.05	67	440	< 0.003	< 0.001	0.024	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	0.595	< 0.0025	< 0.002
	4/28/2020	0.55	76	52	0.27	7.03	47	380	NA	< 0.001	0.025	NA	NA	< 0.005	< 0.001	< 0.0005	NA	NA	< 0.005	< 0.465	< 0.0025	NA
	12/9/2020	0.57	92	88	0.32	7.10	94	580	NA	< 0.001	0.034	NA	NA	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0076	< 0.411	< 0.0025	NA
	5/11/2021	0.61	77	44	0.33	7.22	76	410	< 0.003	< 0.001	0.025	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.533	< 0.0025	< 0.002
	8/24/2021	0.72	78	48	0.34	7.12	15	100	< 0.003	< 0.001	0.024	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.014	< 0.427	< 0.0025	< 0.002
	11/30/2021	0.51	99	56	< 0.003	6.95	62	560	< 0.003	0.0012	0.035	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.0035	< 0.0002	< 0.005	< 0.419	< 0.0025	< 0.002
	2/8/2022	0.47	88	59	0.29	7.15	52	580	< 0.003	< 0.001	0.03	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.0038	< 0.0002	0.006	0.818	< 0.0025	< 0.002
	6/7/2022	0.48	73	43	0.3	7.31	30	320	< 0.003	< 0.001	0.025	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0051	< 0.473	< 0.0025	< 0.002
	8/30/2022	0.67	94	61	0.21	6.80	67	720	< 0.003	< 0.001	0.034	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.546	< 0.0025	< 0.002
11/14/2022	0.84	110	62	0.2	6.85	41	570	< 0.003	< 0.001	0.08	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.583	0.0074	< 0.002	
2/21/2023	0.75	89	54	0.22	7.58	54	540	< 0.0030	< 0.0010	0.035	< 0.0010	< 0.00050	< 0.0050	< 0.0010	< 0.00050	< 0.010	< 0.00020	< 0.0050	< 0.567	0.0037	< 0.0020	
MW-05 down-gradient	5/17/2016	0.70	100	85	0.35	7.08	120	660	< 0.003	< 0.001	0.051	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.373	< 0.0025	< 0.002
	8/16/2016	0.69	110	97	0.30	6.85	150	830	< 0.003	< 0.001	0.060	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.452	< 0.0025	< 0.002
	11/15/2016	0.93	94	66	0.23	6.96	77	620	< 0.003	< 0.001	0.051	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	0.449	< 0.0025	< 0.002
	2/14/2017	0.79	100	100	0.25	7.25	170	760	< 0.003	< 0.001	0.062	< 0.001	< 0.0005	< 0.005	< 0.001							

Table 2. Groundwater Turbidity - Midwest Generation, LLC, Powerton Station, Pekin, IL. Former Ash Basin.

Well	Date	Turbidity (NTU)
MW-01	2/23/2021	78.20
	4/9/2021	6.96
	5/10/2021	3.24
	6/2/2021	3.80
	6/28/2021	4.30
	7/19/2021	4.88
	8/24/2021	3.34
	9/30/2021	3.04
	11/30/2021	5.43
	2/9/2022	11.5
	6/7/2022	3.63
	8/30/2022	4.73
	11/15/2022	3.9
2/22/2023	4.54	
MW-10	2/23/2021	257.70
	4/9/2021	54.91
	5/11/2021	24.74
	6/2/2021	6.02
	6/28/2021	14.11
	7/19/2021	17.53
	8/24/2021	41.55
	9/30/2021	17.07
	11/30/2021	11.92
	2/9/2022	224.6
	6/7/2022	7.88
	8/30/2022	13.34
	11/15/2022	23.18
2/22/2023	14.31	
MW-02	2/22/2021	19.60
	4/8/2021	4.55
	5/11/2021	1.82
	6/2/2021	2.06
	6/28/2021	2.67
	7/19/2021	3.56
	8/24/2021	5.23
	10/1/2021	2.76
	11/30/2021	0.0
	2/8/2022	0.0
	6/7/2022	2.03
	8/30/2022	2.46
	11/14/2022	29.35
2/21/2023	2.63	
MW-03	2/22/2021	8.20
	4/8/2021	4.00
	5/11/2021	2.68
	6/2/2021	3.63
	6/28/2021	3.32
	7/19/2021	4.22
	8/24/2021	5.75
	10/1/2021	2.45
	11/30/2021	0.0
	2/8/2022	0.0
	6/7/2022	1.72
	8/30/2022	2.67
	11/14/2022	4.03
2/21/2023	2.33	
MW-04	2/22/2021	4.20
	4/8/2021	4.05
	5/11/2021	4.33
	6/2/2021	2.12
	6/28/2021	8.21
	7/19/2021	3.84
	8/24/2021	2.92
	10/1/2021	2.72
	11/30/2021	0.0
	2/8/2022	11.09
	6/7/2022	1.62
	8/30/2022	4.05
	11/14/2022	20.70
2/21/2023	3.70	

Table 2. Groundwater Turbidity - Midwest Generation, LLC, Powerton Station, Pekin, IL. Former Ash Basin.

MW-05	2/22/2021	1.72
	4/8/2021	4.00
	5/11/2021	1.82
	6/2/2021	1.88
	6/28/2021	3.49
	7/19/2021	8.39
	8/24/2021	3.20
	10/1/2021	3.12
	11/30/2021	0.0
	2/8/2022	0.0
	6/7/2022	2.33
	8/30/2022	2.70
	11/14/2022	2.05
2/21/2023	2.16	

 **ANALYTICAL REPORT****PREPARED FOR**

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

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**JOB DESCRIPTION**

Powerton CCR FAB

**JOB NUMBER**

500-229775-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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

## Authorization



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Authorized for release by  
Diana Mockler, Project Manager I  
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# Case Narrative

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

Job ID: 500-229775-1

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**Job ID: 500-229775-1**

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**Laboratory: Eurofins Chicago**

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**Narrative**

**Job Narrative  
500-229775-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 2/22/2023 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 -0.3° C, 1.5° C and 1.6° C.

**Metals**

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

**General Chemistry**

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

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# Method Summary

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

Job ID: 500-229775-1

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

#### Protocol References:

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

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

#### Laboratory References:

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

# Sample Summary

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

Job ID: 500-229775-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-229775-1	MW-02	Water	02/21/23 08:15	02/22/23 09:55
500-229775-2	MW-03	Water	02/21/23 09:27	02/22/23 09:55
500-229775-3	MW-04	Water	02/21/23 10:37	02/22/23 09:55
500-229775-4	MW-05	Water	02/21/23 11:36	02/22/23 09:55
500-229775-5	Duplicate	Water	02/21/23 00:00	02/22/23 09:55
500-229775-6	MW-01	Water	02/22/23 10:22	02/23/23 09:50
500-229775-7	MW-10	Water	02/22/23 09:27	02/23/23 09:50

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# Client Sample Results

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

Job ID: 500-229775-1

**Client Sample ID: MW-02**

**Lab Sample ID: 500-229775-1**

Date Collected: 02/21/23 08:15

Matrix: Water

Date Received: 02/22/23 09:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/22/23 16:18	02/23/23 12:44	1
Arsenic	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 14:53	1
<b>Barium</b>	<b>0.095</b>		0.0025		mg/L		02/22/23 16:18	02/23/23 12:44	1
Beryllium	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 12:44	1
<b>Boron</b>	<b>2.5</b>		0.050		mg/L		02/22/23 16:18	02/23/23 12:44	1
Cadmium	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 12:44	1
<b>Calcium</b>	<b>110</b>		0.20		mg/L		02/22/23 16:18	02/23/23 12:44	1
Chromium	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 12:44	1
Cobalt	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 12:44	1
Lead	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 12:44	1
Lithium	<0.010		0.010		mg/L		02/22/23 16:18	02/23/23 12:44	1
Molybdenum	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 12:44	1
Selenium	<0.0025		0.0025		mg/L		02/22/23 16:18	02/23/23 12:44	1
Thallium	<0.0020		0.0020		mg/L		02/22/23 16:18	02/23/23 12:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/02/23 11:45	03/03/23 09:38	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>630</b>		10		mg/L			02/23/23 04:10	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>49</b>		10		mg/L			02/28/23 10:53	5
<b>Fluoride (SM 4500 F C)</b>	<b>0.14</b>		0.10		mg/L			02/23/23 13:49	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>92</b>		25		mg/L			02/28/23 12:19	5

# Client Sample Results

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

Job ID: 500-229775-1

**Client Sample ID: MW-03**  
**Date Collected: 02/21/23 09:27**  
**Date Received: 02/22/23 09:55**

**Lab Sample ID: 500-229775-2**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/22/23 16:18	02/23/23 13:02	1
Arsenic	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 15:10	1
<b>Barium</b>	<b>0.11</b>		0.0025		mg/L		02/22/23 16:18	02/23/23 13:02	1
Beryllium	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 13:02	1
<b>Boron</b>	<b>1.0</b>		0.050		mg/L		02/22/23 16:18	02/23/23 13:02	1
Cadmium	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 13:02	1
<b>Calcium</b>	<b>96</b>		0.20		mg/L		02/22/23 16:18	02/23/23 13:02	1
Chromium	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 13:02	1
Cobalt	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 13:02	1
Lead	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 13:02	1
Lithium	<0.010		0.010		mg/L		02/22/23 16:18	02/23/23 13:02	1
Molybdenum	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 13:02	1
Selenium	<0.0025		0.0025		mg/L		02/22/23 16:18	02/23/23 13:02	1
Thallium	<0.0020		0.0020		mg/L		02/22/23 16:18	02/23/23 13:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/02/23 11:45	03/03/23 09:40	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>550</b>		10		mg/L			02/23/23 04:12	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>53</b>		10		mg/L			02/28/23 10:53	5
<b>Fluoride (SM 4500 F C)</b>	<b>0.20</b>		0.10		mg/L			02/23/23 13:49	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>70</b>		25		mg/L			02/28/23 12:20	5

# Client Sample Results

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

Job ID: 500-229775-1

**Client Sample ID: MW-04**  
**Date Collected: 02/21/23 10:37**  
**Date Received: 02/22/23 09:55**

**Lab Sample ID: 500-229775-3**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/22/23 16:18	02/23/23 13:05	1
Arsenic	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 15:14	1
<b>Barium</b>	<b>0.035</b>		0.0025		mg/L		02/22/23 16:18	02/23/23 13:05	1
Beryllium	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 13:05	1
<b>Boron</b>	<b>0.75</b>		0.050		mg/L		02/22/23 16:18	02/23/23 13:05	1
Cadmium	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 13:05	1
<b>Calcium</b>	<b>89</b>		0.20		mg/L		02/22/23 16:18	02/23/23 13:05	1
Chromium	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 13:05	1
Cobalt	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 13:05	1
Lead	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 13:05	1
Lithium	<0.010		0.010		mg/L		02/22/23 16:18	02/23/23 13:05	1
Molybdenum	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 13:05	1
<b>Selenium</b>	<b>0.0037</b>		0.0025		mg/L		02/22/23 16:18	02/23/23 13:05	1
Thallium	<0.0020		0.0020		mg/L		02/22/23 16:18	02/23/23 13:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/02/23 11:45	03/03/23 09:42	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>540</b>		10		mg/L			02/23/23 04:15	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>54</b>		10		mg/L			02/28/23 10:54	5
<b>Fluoride (SM 4500 F C)</b>	<b>0.22</b>		0.10		mg/L			02/23/23 13:49	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>54</b>		25		mg/L			02/28/23 12:20	5

# Client Sample Results

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

Job ID: 500-229775-1

**Client Sample ID: MW-05**

**Lab Sample ID: 500-229775-4**

Date Collected: 02/21/23 11:36

Matrix: Water

Date Received: 02/22/23 09:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/22/23 16:18	02/23/23 13:08	1
Arsenic	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 15:17	1
<b>Barium</b>	<b>0.052</b>		0.0025		mg/L		02/22/23 16:18	02/23/23 13:08	1
Beryllium	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 13:08	1
<b>Boron</b>	<b>0.68</b>		0.050		mg/L		02/22/23 16:18	02/23/23 13:08	1
Cadmium	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 13:08	1
<b>Calcium</b>	<b>100</b>		0.20		mg/L		02/22/23 16:18	02/23/23 13:08	1
Chromium	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 13:08	1
Cobalt	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 13:08	1
Lead	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 13:08	1
Lithium	<0.010		0.010		mg/L		02/22/23 16:18	02/23/23 13:08	1
Molybdenum	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 13:08	1
<b>Selenium</b>	<b>0.0031</b>		0.0025		mg/L		02/22/23 16:18	02/23/23 13:08	1
Thallium	<0.0020		0.0020		mg/L		02/22/23 16:18	02/23/23 13:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/02/23 11:45	03/03/23 09:44	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>760</b>		10		mg/L			02/23/23 04:18	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>93</b>		10		mg/L			02/28/23 10:54	5
<b>Fluoride (SM 4500 F C)</b>	<b>0.29</b>		0.10		mg/L			02/23/23 13:49	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>97</b>		25		mg/L			02/28/23 12:21	5

# Client Sample Results

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

Job ID: 500-229775-1

**Client Sample ID: Duplicate**  
Date Collected: 02/21/23 00:00  
Date Received: 02/22/23 09:55

**Lab Sample ID: 500-229775-5**  
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/22/23 16:18	02/23/23 13:20	1
Arsenic	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 15:27	1
<b>Barium</b>	<b>0.11</b>		0.0025		mg/L		02/22/23 16:18	02/23/23 13:20	1
Beryllium	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 13:20	1
<b>Boron</b>	<b>0.94</b>		0.050		mg/L		02/22/23 16:18	02/23/23 13:20	1
Cadmium	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 13:20	1
<b>Calcium</b>	<b>90</b>		0.20		mg/L		02/22/23 16:18	02/23/23 13:20	1
Chromium	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 13:20	1
Cobalt	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 13:20	1
Lead	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 13:20	1
Lithium	<0.010		0.010		mg/L		02/22/23 16:18	02/23/23 13:20	1
Molybdenum	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 13:20	1
Selenium	<0.0025		0.0025		mg/L		02/22/23 16:18	02/23/23 13:20	1
Thallium	<0.0020		0.0020		mg/L		02/22/23 16:18	02/23/23 13:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/02/23 11:45	03/03/23 09:46	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>560</b>		10		mg/L			02/23/23 04:20	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>54</b>		10		mg/L			02/28/23 10:54	5
<b>Fluoride (SM 4500 F C)</b>	<b>0.20</b>		0.10		mg/L			02/23/23 13:49	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>66</b>		25		mg/L			02/28/23 12:21	5



# Client Sample Results

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

Job ID: 500-229775-1

**Client Sample ID: MW-01**  
**Date Collected: 02/22/23 10:22**  
**Date Received: 02/23/23 09:50**

**Lab Sample ID: 500-229775-6**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/23/23 16:26	02/24/23 12:00	1
Arsenic	<0.0010		0.0010		mg/L		02/23/23 16:26	02/24/23 12:00	1
<b>Barium</b>	<b>0.082</b>		0.0025		mg/L		02/23/23 16:26	02/24/23 12:00	1
Beryllium	<0.0010		0.0010		mg/L		02/23/23 16:26	02/24/23 12:00	1
<b>Boron</b>	<b>0.46</b>		0.050		mg/L		02/23/23 16:26	02/24/23 12:00	1
Cadmium	<0.00050		0.00050		mg/L		02/23/23 16:26	02/24/23 12:00	1
<b>Calcium</b>	<b>110</b>		0.20		mg/L		02/23/23 16:26	02/24/23 12:00	1
Chromium	<0.0050		0.0050		mg/L		02/23/23 16:26	02/24/23 12:00	1
Cobalt	<0.0010		0.0010		mg/L		02/23/23 16:26	02/24/23 12:00	1
Lead	<0.00050		0.00050		mg/L		02/23/23 16:26	02/24/23 12:00	1
Lithium	<0.010		0.010		mg/L		02/23/23 16:26	02/24/23 12:00	1
Molybdenum	<0.0050		0.0050		mg/L		02/23/23 16:26	02/24/23 12:00	1
Selenium	<0.0025		0.0025		mg/L		02/23/23 16:26	02/24/23 12:00	1
Thallium	<0.0020		0.0020		mg/L		02/23/23 16:26	02/24/23 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/02/23 11:45	03/03/23 10:17	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>500</b>		10		mg/L			02/24/23 02:06	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>52</b>		10		mg/L			02/28/23 10:54	5
Fluoride (SM 4500 F C)	<0.10		0.10		mg/L			02/28/23 14:13	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>43</b>		25		mg/L			02/28/23 12:22	5

# Client Sample Results

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

Job ID: 500-229775-1

**Client Sample ID: MW-10**  
**Date Collected: 02/22/23 09:27**  
**Date Received: 02/23/23 09:50**

**Lab Sample ID: 500-229775-7**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/23/23 16:26	02/24/23 12:17	1
<b>Arsenic</b>	<b>0.0010</b>		0.0010		mg/L		02/23/23 16:26	02/24/23 12:17	1
<b>Barium</b>	<b>0.22</b>		0.0025		mg/L		02/23/23 16:26	02/24/23 12:17	1
Beryllium	<0.0010		0.0010		mg/L		02/23/23 16:26	02/24/23 12:17	1
<b>Boron</b>	<b>1.3</b>		0.050		mg/L		02/23/23 16:26	02/24/23 12:17	1
Cadmium	<0.00050		0.00050		mg/L		02/23/23 16:26	02/24/23 12:17	1
<b>Calcium</b>	<b>100</b>		0.20		mg/L		02/23/23 16:26	02/24/23 12:17	1
Chromium	<0.0050		0.0050		mg/L		02/23/23 16:26	02/24/23 12:17	1
<b>Cobalt</b>	<b>0.0039</b>		0.0010		mg/L		02/23/23 16:26	02/24/23 12:17	1
<b>Lead</b>	<b>0.00057</b>		0.00050		mg/L		02/23/23 16:26	02/24/23 12:17	1
Lithium	<0.010		0.010		mg/L		02/23/23 16:26	02/24/23 12:17	1
Molybdenum	<0.0050		0.0050		mg/L		02/23/23 16:26	02/24/23 12:17	1
<b>Selenium</b>	<b>0.0040</b>		0.0025		mg/L		02/23/23 16:26	02/24/23 12:17	1
Thallium	<0.0020		0.0020		mg/L		02/23/23 16:26	02/24/23 12:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/02/23 11:45	03/03/23 10:19	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids (SM 2540C)</b>	<b>510</b>		10		mg/L			02/24/23 02:09	1
<b>Chloride (SM 4500 Cl- E)</b>	<b>40</b>		10		mg/L			02/28/23 10:55	5
<b>Fluoride (SM 4500 F C)</b>	<b>0.22</b>		0.10		mg/L			02/28/23 14:13	1
<b>Sulfate (SM 4500 SO4 E)</b>	<b>66</b>		25		mg/L			02/28/23 12:36	5

# Definitions/Glossary

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

Job ID: 500-229775-1

## Qualifiers

### Metals

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

## Glossary

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

# QC Association Summary

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

Job ID: 500-229775-1

## Metals

### Prep Batch: 699812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total Recoverable	Water	3005A	
500-229775-2	MW-03	Total Recoverable	Water	3005A	
500-229775-3	MW-04	Total Recoverable	Water	3005A	
500-229775-4	MW-05	Total Recoverable	Water	3005A	
500-229775-5	Duplicate	Total Recoverable	Water	3005A	
MB 500-699812/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-699812/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-229775-1 MS	MW-02	Total Recoverable	Water	3005A	
500-229775-1 MSD	MW-02	Total Recoverable	Water	3005A	
500-229775-1 DU	MW-02	Total Recoverable	Water	3005A	

### Analysis Batch: 699991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total Recoverable	Water	6020A	699812
500-229775-2	MW-03	Total Recoverable	Water	6020A	699812
500-229775-3	MW-04	Total Recoverable	Water	6020A	699812
500-229775-4	MW-05	Total Recoverable	Water	6020A	699812
500-229775-5	Duplicate	Total Recoverable	Water	6020A	699812
MB 500-699812/1-A	Method Blank	Total Recoverable	Water	6020A	699812
LCS 500-699812/2-A	Lab Control Sample	Total Recoverable	Water	6020A	699812
500-229775-1 MS	MW-02	Total Recoverable	Water	6020A	699812
500-229775-1 MSD	MW-02	Total Recoverable	Water	6020A	699812
500-229775-1 DU	MW-02	Total Recoverable	Water	6020A	699812

### Analysis Batch: 699994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total Recoverable	Water	6020A	699812
500-229775-2	MW-03	Total Recoverable	Water	6020A	699812
500-229775-3	MW-04	Total Recoverable	Water	6020A	699812
500-229775-4	MW-05	Total Recoverable	Water	6020A	699812
500-229775-5	Duplicate	Total Recoverable	Water	6020A	699812
MB 500-699812/1-A	Method Blank	Total Recoverable	Water	6020A	699812
LCS 500-699812/2-A	Lab Control Sample	Total Recoverable	Water	6020A	699812
500-229775-1 MS	MW-02	Total Recoverable	Water	6020A	699812
500-229775-1 MSD	MW-02	Total Recoverable	Water	6020A	699812
500-229775-1 DU	MW-02	Total Recoverable	Water	6020A	699812

### Prep Batch: 700008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-6	MW-01	Total Recoverable	Water	3005A	
500-229775-7	MW-10	Total Recoverable	Water	3005A	
MB 500-700008/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-700008/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-229775-6 MS	MW-01	Total Recoverable	Water	3005A	
500-229775-6 MSD	MW-01	Total Recoverable	Water	3005A	
500-229775-6 DU	MW-01	Total Recoverable	Water	3005A	

### Analysis Batch: 700200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-6	MW-01	Total Recoverable	Water	6020A	700008
500-229775-7	MW-10	Total Recoverable	Water	6020A	700008

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# QC Association Summary

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

Job ID: 500-229775-1

## Metals (Continued)

### Analysis Batch: 700200 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-700008/1-A	Method Blank	Total Recoverable	Water	6020A	700008
LCS 500-700008/2-A	Lab Control Sample	Total Recoverable	Water	6020A	700008
500-229775-6 MS	MW-01	Total Recoverable	Water	6020A	700008
500-229775-6 MSD	MW-01	Total Recoverable	Water	6020A	700008
500-229775-6 DU	MW-01	Total Recoverable	Water	6020A	700008

### Prep Batch: 700891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total/NA	Water	7470A	
500-229775-2	MW-03	Total/NA	Water	7470A	
500-229775-3	MW-04	Total/NA	Water	7470A	
500-229775-4	MW-05	Total/NA	Water	7470A	
500-229775-5	Duplicate	Total/NA	Water	7470A	
500-229775-6	MW-01	Total/NA	Water	7470A	
500-229775-7	MW-10	Total/NA	Water	7470A	
MB 500-700891/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-700891/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-229775-5 MS	Duplicate	Total/NA	Water	7470A	
500-229775-5 MSD	Duplicate	Total/NA	Water	7470A	
500-229775-5 DU	Duplicate	Total/NA	Water	7470A	

### Analysis Batch: 701104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total/NA	Water	7470A	700891
500-229775-2	MW-03	Total/NA	Water	7470A	700891
500-229775-3	MW-04	Total/NA	Water	7470A	700891
500-229775-4	MW-05	Total/NA	Water	7470A	700891
500-229775-5	Duplicate	Total/NA	Water	7470A	700891
500-229775-6	MW-01	Total/NA	Water	7470A	700891
500-229775-7	MW-10	Total/NA	Water	7470A	700891
MB 500-700891/12-A	Method Blank	Total/NA	Water	7470A	700891
LCS 500-700891/13-A	Lab Control Sample	Total/NA	Water	7470A	700891
500-229775-5 MS	Duplicate	Total/NA	Water	7470A	700891
500-229775-5 MSD	Duplicate	Total/NA	Water	7470A	700891
500-229775-5 DU	Duplicate	Total/NA	Water	7470A	700891

## General Chemistry

### Analysis Batch: 699823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total/NA	Water	SM 2540C	
500-229775-2	MW-03	Total/NA	Water	SM 2540C	
500-229775-3	MW-04	Total/NA	Water	SM 2540C	
500-229775-4	MW-05	Total/NA	Water	SM 2540C	
500-229775-5	Duplicate	Total/NA	Water	SM 2540C	
MB 500-699823/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-699823/2	Lab Control Sample	Total/NA	Water	SM 2540C	

### Analysis Batch: 699977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total/NA	Water	SM 4500 F C	

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# QC Association Summary

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

Job ID: 500-229775-1

## General Chemistry (Continued)

### Analysis Batch: 699977 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-2	MW-03	Total/NA	Water	SM 4500 F C	
500-229775-3	MW-04	Total/NA	Water	SM 4500 F C	
500-229775-4	MW-05	Total/NA	Water	SM 4500 F C	
500-229775-5	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-699977/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-699977/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

### Analysis Batch: 700037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-6	MW-01	Total/NA	Water	SM 2540C	
500-229775-7	MW-10	Total/NA	Water	SM 2540C	
MB 500-700037/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-700037/2	Lab Control Sample	Total/NA	Water	SM 2540C	

### Analysis Batch: 700503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total/NA	Water	SM 4500 Cl- E	
500-229775-2	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-229775-3	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-229775-4	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-229775-5	Duplicate	Total/NA	Water	SM 4500 Cl- E	
500-229775-6	MW-01	Total/NA	Water	SM 4500 Cl- E	
500-229775-7	MW-10	Total/NA	Water	SM 4500 Cl- E	
MB 500-700503/16	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-700503/17	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

### Analysis Batch: 700520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-229775-2	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-229775-3	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-229775-4	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-229775-5	Duplicate	Total/NA	Water	SM 4500 SO4 E	
500-229775-6	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-229775-7	MW-10	Total/NA	Water	SM 4500 SO4 E	
MB 500-700520/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-700520/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

### Analysis Batch: 700591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-6	MW-01	Total/NA	Water	SM 4500 F C	
500-229775-7	MW-10	Total/NA	Water	SM 4500 F C	
MB 500-700591/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-700591/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

# QC Sample Results

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

Job ID: 500-229775-1

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

**Lab Sample ID: MB 500-699812/1-A**  
**Matrix: Water**  
**Analysis Batch: 699991**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 699812**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0030		0.0030		mg/L		02/22/23 16:18	02/23/23 12:37	1
Barium	<0.0025		0.0025		mg/L		02/22/23 16:18	02/23/23 12:37	1
Beryllium	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 12:37	1
Boron	<0.050		0.050		mg/L		02/22/23 16:18	02/23/23 12:37	1
Cadmium	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 12:37	1
Calcium	<0.20		0.20		mg/L		02/22/23 16:18	02/23/23 12:37	1
Chromium	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 12:37	1
Cobalt	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 12:37	1
Lead	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 12:37	1
Lithium	<0.010		0.010		mg/L		02/22/23 16:18	02/23/23 12:37	1
Molybdenum	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 12:37	1
Selenium	<0.0025		0.0025		mg/L		02/22/23 16:18	02/23/23 12:37	1
Thallium	<0.0020		0.0020		mg/L		02/22/23 16:18	02/23/23 12:37	1

**Lab Sample ID: MB 500-699812/1-A**  
**Matrix: Water**  
**Analysis Batch: 699994**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 699812**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 14:46	1

**Lab Sample ID: LCS 500-699812/2-A**  
**Matrix: Water**  
**Analysis Batch: 699991**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 699812**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	2.00	2.07		mg/L		104	80 - 120
Beryllium	0.0500	0.0497		mg/L		99	80 - 120
Boron	1.00	0.968		mg/L		97	80 - 120
Cadmium	0.0500	0.0502		mg/L		100	80 - 120
Calcium	10.0	9.97		mg/L		100	80 - 120
Chromium	0.200	0.210		mg/L		105	80 - 120
Cobalt	0.500	0.529		mg/L		106	80 - 120
Lead	0.100	0.106		mg/L		106	80 - 120
Lithium	0.500	0.526		mg/L		105	80 - 120
Molybdenum	1.00	0.979		mg/L		98	80 - 120
Selenium	0.100	0.0992		mg/L		99	80 - 120
Thallium	0.100	0.107		mg/L		107	80 - 120

**Lab Sample ID: LCS 500-699812/2-A**  
**Matrix: Water**  
**Analysis Batch: 699994**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 699812**

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

# QC Sample Results

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

Job ID: 500-229775-1

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

**Lab Sample ID: 500-229775-1 MS**  
**Matrix: Water**  
**Analysis Batch: 699991**

**Client Sample ID: MW-02**  
**Prep Type: Total Recoverable**  
**Prep Batch: 699812**

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS	Unit	D	%Rec	%Rec	
	Result			Result	Qualifier				Limits	Limits
Antimony	<0.0030		0.500	0.544		mg/L		109	75 - 125	
Barium	0.095		2.00	2.10		mg/L		100	75 - 125	
Beryllium	<0.0010		0.0500	0.0502		mg/L		100	75 - 125	
Boron	2.5		1.00	3.44		mg/L		98	75 - 125	
Cadmium	<0.00050		0.0500	0.0507		mg/L		101	75 - 125	
Calcium	110		10.0	117	4	mg/L		91	75 - 125	
Chromium	<0.0050		0.200	0.206		mg/L		103	75 - 125	
Cobalt	<0.0010		0.500	0.505		mg/L		101	75 - 125	
Lead	<0.00050		0.100	0.102		mg/L		102	75 - 125	
Lithium	<0.010		0.500	0.526		mg/L		104	75 - 125	
Molybdenum	<0.0050		1.00	1.02		mg/L		102	75 - 125	
Selenium	<0.0025		0.100	0.106		mg/L		104	75 - 125	
Thallium	<0.0020		0.100	0.104		mg/L		104	75 - 125	

**Lab Sample ID: 500-229775-1 MS**  
**Matrix: Water**  
**Analysis Batch: 699994**

**Client Sample ID: MW-02**  
**Prep Type: Total Recoverable**  
**Prep Batch: 699812**

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS	Unit	D	%Rec	%Rec	
	Result			Result	Qualifier				Limits	Limits
Arsenic	<0.0010		0.100	0.101		mg/L		100	75 - 125	

**Lab Sample ID: 500-229775-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 699991**

**Client Sample ID: MW-02**  
**Prep Type: Total Recoverable**  
**Prep Batch: 699812**

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result			Result	Qualifier				Limits	Limits	RPD	Limit
Antimony	<0.0030		0.500	0.539		mg/L		108	75 - 125	1	20	
Barium	0.095		2.00	2.11		mg/L		101	75 - 125	0	20	
Beryllium	<0.0010		0.0500	0.0497		mg/L		99	75 - 125	1	20	
Boron	2.5		1.00	3.42		mg/L		95	75 - 125	1	20	
Cadmium	<0.00050		0.0500	0.0500		mg/L		100	75 - 125	1	20	
Calcium	110		10.0	115	4	mg/L		73	75 - 125	2	20	
Chromium	<0.0050		0.200	0.205		mg/L		102	75 - 125	1	20	
Cobalt	<0.0010		0.500	0.502		mg/L		100	75 - 125	1	20	
Lead	<0.00050		0.100	0.103		mg/L		103	75 - 125	1	20	
Lithium	<0.010		0.500	0.527		mg/L		104	75 - 125	0	20	
Molybdenum	<0.0050		1.00	1.01		mg/L		101	75 - 125	1	20	
Selenium	<0.0025		0.100	0.104		mg/L		102	75 - 125	1	20	
Thallium	<0.0020		0.100	0.104		mg/L		104	75 - 125	0	20	

**Lab Sample ID: 500-229775-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 699994**

**Client Sample ID: MW-02**  
**Prep Type: Total Recoverable**  
**Prep Batch: 699812**

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result			Result	Qualifier				Limits	Limits	RPD	Limit
Arsenic	<0.0010		0.100	0.102		mg/L		101	75 - 125	0	20	



# QC Sample Results

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

Job ID: 500-229775-1

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

**Lab Sample ID: 500-229775-1 DU**  
**Matrix: Water**  
**Analysis Batch: 699991**

**Client Sample ID: MW-02**  
**Prep Type: Total Recoverable**  
**Prep Batch: 699812**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	<0.0030		<0.0030		mg/L		NC	20
Barium	0.095		0.0968		mg/L		2	20
Beryllium	<0.0010		<0.0010		mg/L		NC	20
Boron	2.5		2.56		mg/L		4	20
Cadmium	<0.00050		<0.00050		mg/L		NC	20
Calcium	110		111		mg/L		3	20
Chromium	<0.0050		<0.0050		mg/L		NC	20
Cobalt	<0.0010		<0.0010		mg/L		NC	20
Lead	<0.00050		<0.00050		mg/L		NC	20
Lithium	<0.010		<0.010		mg/L		NC	20
Molybdenum	<0.0050		<0.0050		mg/L		NC	20
Selenium	<0.0025		<0.0025		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

**Lab Sample ID: 500-229775-1 DU**  
**Matrix: Water**  
**Analysis Batch: 699994**

**Client Sample ID: MW-02**  
**Prep Type: Total Recoverable**  
**Prep Batch: 699812**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Arsenic	<0.0010		<0.0010		mg/L		NC	20

**Lab Sample ID: MB 500-700008/1-A**  
**Matrix: Water**  
**Analysis Batch: 700200**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 700008**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0030		0.0030		mg/L		02/23/23 16:26	02/24/23 11:53	1
Arsenic	<0.0010		0.0010		mg/L		02/23/23 16:26	02/24/23 11:53	1
Barium	<0.0025		0.0025		mg/L		02/23/23 16:26	02/24/23 11:53	1
Beryllium	<0.0010		0.0010		mg/L		02/23/23 16:26	02/24/23 11:53	1
Boron	<0.050		0.050		mg/L		02/23/23 16:26	02/24/23 11:53	1
Cadmium	<0.00050		0.00050		mg/L		02/23/23 16:26	02/24/23 11:53	1
Calcium	<0.20		0.20		mg/L		02/23/23 16:26	02/24/23 11:53	1
Chromium	<0.0050		0.0050		mg/L		02/23/23 16:26	02/24/23 11:53	1
Cobalt	<0.0010		0.0010		mg/L		02/23/23 16:26	02/24/23 11:53	1
Lead	<0.00050		0.00050		mg/L		02/23/23 16:26	02/24/23 11:53	1
Lithium	<0.010		0.010		mg/L		02/23/23 16:26	02/24/23 11:53	1
Molybdenum	<0.0050		0.0050		mg/L		02/23/23 16:26	02/24/23 11:53	1
Selenium	<0.0025		0.0025		mg/L		02/23/23 16:26	02/24/23 11:53	1
Thallium	<0.0020		0.0020		mg/L		02/23/23 16:26	02/24/23 11:53	1

**Lab Sample ID: LCS 500-700008/2-A**  
**Matrix: Water**  
**Analysis Batch: 700200**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 700008**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.100	0.0951		mg/L		95	80 - 120
Barium	2.00	2.07		mg/L		103	80 - 120

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# QC Sample Results

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

Job ID: 500-229775-1

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

**Lab Sample ID: LCS 500-700008/2-A**  
**Matrix: Water**  
**Analysis Batch: 700200**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 700008**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	0.0500	0.0503		mg/L		101	80 - 120
Boron	1.00	0.901		mg/L		90	80 - 120
Cadmium	0.0500	0.0491		mg/L		98	80 - 120
Calcium	10.0	9.68		mg/L		97	80 - 120
Chromium	0.200	0.206		mg/L		103	80 - 120
Cobalt	0.500	0.515		mg/L		103	80 - 120
Lead	0.100	0.104		mg/L		104	80 - 120
Lithium	0.500	0.491		mg/L		98	80 - 120
Molybdenum	1.00	0.972		mg/L		97	80 - 120
Selenium	0.100	0.0982		mg/L		98	80 - 120
Thallium	0.100	0.106		mg/L		106	80 - 120

**Lab Sample ID: 500-229775-6 MS**  
**Matrix: Water**  
**Analysis Batch: 700200**

**Client Sample ID: MW-01**  
**Prep Type: Total Recoverable**  
**Prep Batch: 700008**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.0030		0.500	0.530		mg/L		106	75 - 125
Arsenic	<0.0010		0.100	0.0951		mg/L		95	75 - 125
Barium	0.082		2.00	2.12		mg/L		102	75 - 125
Beryllium	<0.0010		0.0500	0.0487		mg/L		97	75 - 125
Boron	0.46		1.00	1.36		mg/L		90	75 - 125
Cadmium	<0.00050		0.0500	0.0495		mg/L		99	75 - 125
Calcium	110		10.0	117	4	mg/L		87	75 - 125
Chromium	<0.0050		0.200	0.201		mg/L		101	75 - 125
Cobalt	<0.0010		0.500	0.494		mg/L		99	75 - 125
Lead	<0.00050		0.100	0.104		mg/L		104	75 - 125
Lithium	<0.010		0.500	0.486		mg/L		96	75 - 125
Molybdenum	<0.0050		1.00	1.00		mg/L		100	75 - 125
Selenium	<0.0025		0.100	0.103		mg/L		101	75 - 125
Thallium	<0.0020		0.100	0.105		mg/L		105	75 - 125

**Lab Sample ID: 500-229775-6 MSD**  
**Matrix: Water**  
**Analysis Batch: 700200**

**Client Sample ID: MW-01**  
**Prep Type: Total Recoverable**  
**Prep Batch: 700008**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.0030		0.500	0.529		mg/L		106	75 - 125	0	20
Arsenic	<0.0010		0.100	0.0945		mg/L		94	75 - 125	1	20
Barium	0.082		2.00	2.10		mg/L		101	75 - 125	1	20
Beryllium	<0.0010		0.0500	0.0476		mg/L		95	75 - 125	2	20
Boron	0.46		1.00	1.35		mg/L		89	75 - 125	0	20
Cadmium	<0.00050		0.0500	0.0498		mg/L		100	75 - 125	1	20
Calcium	110		10.0	115	4	mg/L		69	75 - 125	1	20
Chromium	<0.0050		0.200	0.200		mg/L		100	75 - 125	0	20
Cobalt	<0.0010		0.500	0.495		mg/L		99	75 - 125	0	20
Lead	<0.00050		0.100	0.102		mg/L		102	75 - 125	1	20
Lithium	<0.010		0.500	0.477		mg/L		94	75 - 125	2	20
Molybdenum	<0.0050		1.00	1.00		mg/L		100	75 - 125	0	20

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# QC Sample Results

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

Job ID: 500-229775-1

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

**Lab Sample ID: 500-229775-6 MSD**  
**Matrix: Water**  
**Analysis Batch: 700200**

**Client Sample ID: MW-01**  
**Prep Type: Total Recoverable**  
**Prep Batch: 700008**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	<0.0025		0.100	0.102		mg/L		99	75 - 125	2	20
Thallium	<0.0020		0.100	0.104		mg/L		104	75 - 125	1	20

**Lab Sample ID: 500-229775-6 DU**  
**Matrix: Water**  
**Analysis Batch: 700200**

**Client Sample ID: MW-01**  
**Prep Type: Total Recoverable**  
**Prep Batch: 700008**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.0030		<0.0030		mg/L		NC	20
Arsenic	<0.0010		<0.0010		mg/L		NC	20
Barium	0.082		0.0789		mg/L		3	20
Beryllium	<0.0010		<0.0010		mg/L		NC	20
Boron	0.46		0.444		mg/L		3	20
Cadmium	<0.00050		<0.00050		mg/L		NC	20
Calcium	110		106		mg/L		2	20
Chromium	<0.0050		<0.0050		mg/L		NC	20
Cobalt	<0.0010		<0.0010		mg/L		NC	20
Lead	<0.00050		<0.00050		mg/L		NC	20
Lithium	<0.010		<0.010		mg/L		NC	20
Molybdenum	<0.0050		<0.0050		mg/L		NC	20
Selenium	<0.0025		<0.0025		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 500-700891/12-A**  
**Matrix: Water**  
**Analysis Batch: 701104**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 700891**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/02/23 11:45	03/03/23 09:32	1

**Lab Sample ID: LCS 500-700891/13-A**  
**Matrix: Water**  
**Analysis Batch: 701104**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 700891**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00198	0.00188		mg/L		95	80 - 120

**Lab Sample ID: 500-229775-5 MS**  
**Matrix: Water**  
**Analysis Batch: 701104**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 700891**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.00020		0.00100	0.00106		mg/L		106	75 - 125

# QC Sample Results

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

Job ID: 500-229775-1

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

**Lab Sample ID: 500-229775-5 MSD**  
**Matrix: Water**  
**Analysis Batch: 701104**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 700891**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.00020		0.00100	0.00104		mg/L		104	75 - 125	2	20

**Lab Sample ID: 500-229775-5 DU**  
**Matrix: Water**  
**Analysis Batch: 701104**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 700891**

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 500-699823/1**  
**Matrix: Water**  
**Analysis Batch: 699823**

**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			02/23/23 03:29	1

**Lab Sample ID: LCS 500-699823/2**  
**Matrix: Water**  
**Analysis Batch: 699823**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	276		mg/L		110	80 - 120

**Lab Sample ID: MB 500-700037/1**  
**Matrix: Water**  
**Analysis Batch: 700037**

**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			02/24/23 01:46	1

**Lab Sample ID: LCS 500-700037/2**  
**Matrix: Water**  
**Analysis Batch: 700037**

**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	252		mg/L		101	80 - 120

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

**Lab Sample ID: MB 500-700503/16**  
**Matrix: Water**  
**Analysis Batch: 700503**

**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			02/28/23 10:51	1

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# QC Sample Results

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

Job ID: 500-229775-1

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

Lab Sample ID: LCS 500-700503/17  
Matrix: Water  
Analysis Batch: 700503

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	19.8		mg/L		99	85 - 115

## Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-699977/3  
Matrix: Water  
Analysis Batch: 699977

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			02/23/23 13:49	1

Lab Sample ID: LCS 500-699977/4  
Matrix: Water  
Analysis Batch: 699977

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	10.1		mg/L		101	90 - 119

Lab Sample ID: MB 500-700591/3  
Matrix: Water  
Analysis Batch: 700591

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			02/28/23 14:13	1

Lab Sample ID: LCS 500-700591/4  
Matrix: Water  
Analysis Batch: 700591

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

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

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

Lab Sample ID: MB 500-700520/16  
Matrix: Water  
Analysis Batch: 700520

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			02/28/23 12:14	1

Lab Sample ID: LCS 500-700520/17  
Matrix: Water  
Analysis Batch: 700520

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	21.6		mg/L		108	88 - 123







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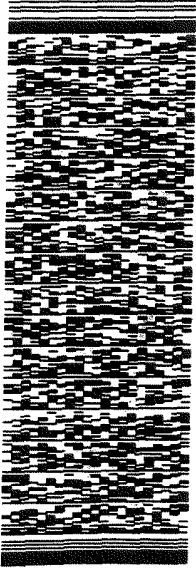
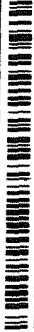
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(709) 594-5200 REF:  
YAU: DEPT:

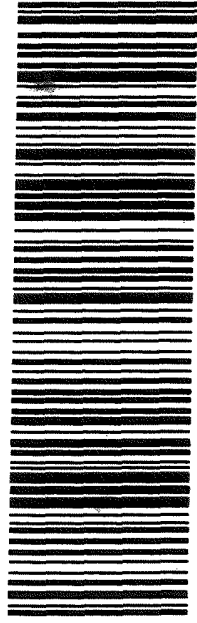


REL# 3786346

4 of 5  
MPS# 3948 9886 1794  
0201  
Mstr# 3948 9886 1761

WED - 22 FEB 10:30A  
PRIORITY OVERNIGHT

**XN JOTA**  
AHS  
60484  
IL-US ORD



RT 519 5 10:30 A  
ST 7 1794 02:22

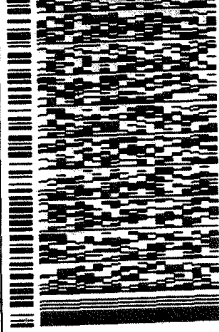
ORIGIN ID:PIAA (262) 278-1621  
KAE LIN SPERLE  
KPRG AND ASSOCIATES  
414 PLAZA DR STE 106  
WESTMONT, IL 60559  
UNITED STATES US

SHIP DATE: 21FEB23  
ACTWGT: 40.90 LB  
CAD: 6994780/SSFE2401  
DIMS: 24x13x14 IN

TO EUROFINS CHICAGO  
EUROFINS CHICAGO  
2417 BOND ST

UNIVERSITY PARK IL 60484

(709) 594-5200 REF:  
YAU: DEPT:



FedEx  
Express

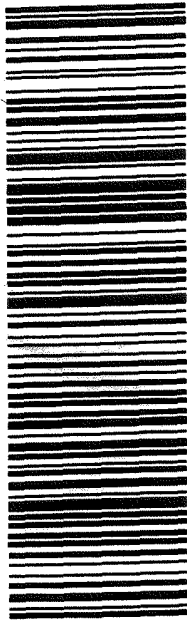


REL# 3786346

1 of 5  
TRK# 3948 9886 1761  
0201  
## MASTER ##

WED - 22 FEB 10:30  
PRIORITY OVERNIGHT

**XN JOTA**  
AH  
6048  
IL-US OR



RT 519 5 10:30 A  
ST 7 1761 02:22

500-229775 Waybi



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# Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-229775-1

**Login Number: 229775**

**List Number: 1**

**Creator: James, Jeff A**

**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	1.6,1.5,-0.3
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: Powerton CCR FAB

Job ID: 500-229775-1

**Client Sample ID: MW-02**  
**Date Collected: 02/21/23 08:15**  
**Date Received: 02/22/23 09:55**

**Lab Sample ID: 500-229775-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	699991	FXG	EET CHI	02/23/23 12:44
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	699994	FXG	EET CHI	02/23/23 14:53
Total/NA	Prep	7470A			700891	MJG	EET CHI	03/02/23 11:45 - 03/02/23 13:45 <sup>1</sup>
Total/NA	Analysis	7470A		1	701104	MJG	EET CHI	03/03/23 09:38
Total/NA	Analysis	SM 2540C		1	699823	CLB	EET CHI	02/23/23 04:10
Total/NA	Analysis	SM 4500 CI- E		5	700503	LP	EET CHI	02/28/23 10:53
Total/NA	Analysis	SM 4500 F C		1	699977	EH	EET CHI	02/23/23 13:49
Total/NA	Analysis	SM 4500 SO4 E		5	700520	LP	EET CHI	02/28/23 12:19

**Client Sample ID: MW-03**  
**Date Collected: 02/21/23 09:27**  
**Date Received: 02/22/23 09:55**

**Lab Sample ID: 500-229775-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	699991	FXG	EET CHI	02/23/23 13:02
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	699994	FXG	EET CHI	02/23/23 15:10
Total/NA	Prep	7470A			700891	MJG	EET CHI	03/02/23 11:45 - 03/02/23 13:45 <sup>1</sup>
Total/NA	Analysis	7470A		1	701104	MJG	EET CHI	03/03/23 09:40
Total/NA	Analysis	SM 2540C		1	699823	CLB	EET CHI	02/23/23 04:12
Total/NA	Analysis	SM 4500 CI- E		5	700503	LP	EET CHI	02/28/23 10:53
Total/NA	Analysis	SM 4500 F C		1	699977	EH	EET CHI	02/23/23 13:49
Total/NA	Analysis	SM 4500 SO4 E		5	700520	LP	EET CHI	02/28/23 12:20

**Client Sample ID: MW-04**  
**Date Collected: 02/21/23 10:37**  
**Date Received: 02/22/23 09:55**

**Lab Sample ID: 500-229775-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	699991	FXG	EET CHI	02/23/23 13:05
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	699994	FXG	EET CHI	02/23/23 15:14
Total/NA	Prep	7470A			700891	MJG	EET CHI	03/02/23 11:45 - 03/02/23 13:45 <sup>1</sup>
Total/NA	Analysis	7470A		1	701104	MJG	EET CHI	03/03/23 09:42
Total/NA	Analysis	SM 2540C		1	699823	CLB	EET CHI	02/23/23 04:15
Total/NA	Analysis	SM 4500 CI- E		5	700503	LP	EET CHI	02/28/23 10:54
Total/NA	Analysis	SM 4500 F C		1	699977	EH	EET CHI	02/23/23 13:49
Total/NA	Analysis	SM 4500 SO4 E		5	700520	LP	EET CHI	02/28/23 12:20

# Lab Chronicle

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

Job ID: 500-229775-1

**Client Sample ID: MW-05**  
**Date Collected: 02/21/23 11:36**  
**Date Received: 02/22/23 09:55**

**Lab Sample ID: 500-229775-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	699991	FXG	EET CHI	02/23/23 13:08
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	699994	FXG	EET CHI	02/23/23 15:17
Total/NA	Prep	7470A			700891	MJG	EET CHI	03/02/23 11:45 - 03/02/23 13:45 <sup>1</sup>
Total/NA	Analysis	7470A		1	701104	MJG	EET CHI	03/03/23 09:44
Total/NA	Analysis	SM 2540C		1	699823	CLB	EET CHI	02/23/23 04:18
Total/NA	Analysis	SM 4500 Cl- E		5	700503	LP	EET CHI	02/28/23 10:54
Total/NA	Analysis	SM 4500 F C		1	699977	EH	EET CHI	02/23/23 13:49
Total/NA	Analysis	SM 4500 SO4 E		5	700520	LP	EET CHI	02/28/23 12:21

**Client Sample ID: Duplicate**  
**Date Collected: 02/21/23 00:00**  
**Date Received: 02/22/23 09:55**

**Lab Sample ID: 500-229775-5**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	699991	FXG	EET CHI	02/23/23 13:20
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	699994	FXG	EET CHI	02/23/23 15:27
Total/NA	Prep	7470A			700891	MJG	EET CHI	03/02/23 11:45 - 03/02/23 13:45 <sup>1</sup>
Total/NA	Analysis	7470A		1	701104	MJG	EET CHI	03/03/23 09:46
Total/NA	Analysis	SM 2540C		1	699823	CLB	EET CHI	02/23/23 04:20
Total/NA	Analysis	SM 4500 Cl- E		5	700503	LP	EET CHI	02/28/23 10:54
Total/NA	Analysis	SM 4500 F C		1	699977	EH	EET CHI	02/23/23 13:49
Total/NA	Analysis	SM 4500 SO4 E		5	700520	LP	EET CHI	02/28/23 12:21

**Client Sample ID: MW-01**  
**Date Collected: 02/22/23 10:22**  
**Date Received: 02/23/23 09:50**

**Lab Sample ID: 500-229775-6**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			700008	RN	EET CHI	02/23/23 16:26 - 02/23/23 16:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	700200	FXG	EET CHI	02/24/23 12:00
Total/NA	Prep	7470A			700891	MJG	EET CHI	03/02/23 11:45 - 03/02/23 13:45 <sup>1</sup>
Total/NA	Analysis	7470A		1	701104	MJG	EET CHI	03/03/23 10:17
Total/NA	Analysis	SM 2540C		1	700037	CLB	EET CHI	02/24/23 02:06
Total/NA	Analysis	SM 4500 Cl- E		5	700503	LP	EET CHI	02/28/23 10:54
Total/NA	Analysis	SM 4500 F C		1	700591	EH	EET CHI	02/28/23 14:13
Total/NA	Analysis	SM 4500 SO4 E		5	700520	LP	EET CHI	02/28/23 12:22

# Lab Chronicle

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

Job ID: 500-229775-1

**Client Sample ID: MW-10**

**Lab Sample ID: 500-229775-7**

**Date Collected: 02/22/23 09:27**

**Matrix: Water**

**Date Received: 02/23/23 09:50**

<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 Recoverable	Prep	3005A			700008	RN	EET CHI	02/23/23 16:26 - 02/23/23 16:56 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	700200	FXG	EET CHI	02/24/23 12:17
Total/NA	Prep	7470A			700891	MJG	EET CHI	03/02/23 11:45 - 03/02/23 13:45 <sup>1</sup>
Total/NA	Analysis	7470A		1	701104	MJG	EET CHI	03/03/23 10:19
Total/NA	Analysis	SM 2540C		1	700037	CLB	EET CHI	02/24/23 02:09
Total/NA	Analysis	SM 4500 Cl- E		5	700503	LP	EET CHI	02/28/23 10:55
Total/NA	Analysis	SM 4500 F C		1	700591	EH	EET CHI	02/28/23 14:13
Total/NA	Analysis	SM 4500 SO4 E		5	700520	LP	EET CHI	02/28/23 12:36

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

**Laboratory References:**

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



# Accreditation/Certification Summary

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

Job ID: 500-229775-1

## Laboratory: Eurofins Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-29-23

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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 3/24/2023 9:05:34 AM

## JOB DESCRIPTION

Powerton CCR FAB (RAD)

## JOB NUMBER

500-229775-2

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
3/24/2023 9:05:34 AM

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/Site: Powerton CCR FAB (RAD)

Job ID: 500-229775-2

## Job ID: 500-229775-2

### Laboratory: Eurofins Chicago

#### Narrative

#### Job Narrative 500-229775-2

#### Comments

No additional comments.

#### Receipt

The samples were received on 2/22/2023 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 -0.3° C, 1.5° C and 1.6° C.

#### RAD

Method 903.0: Radium-226 batch 601827

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

MW-01 (500-229775-6), MW-10 (500-229775-7), (LCS 160-601827/2-A), (MB 160-601827/1-A), (500-229829-E-11-A) and (500-229829-C-11-A DU)

Methods 903.0, 9315: Radium-226 batch 601677

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

MW-02 (500-229775-1), MW-03 (500-229775-2), MW-04 (500-229775-3), MW-05 (500-229775-4), Duplicate (500-229775-5), (LCS 160-601677/2-A), (MB 160-601677/1-A) and (500-229775-C-1-A DU). Methods 904.0, 9320: Radium-228 prep batch 160-601682:

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

MW-02 (500-229775-1), MW-03 (500-229775-2), MW-04 (500-229775-3), MW-05 (500-229775-4), Duplicate (500-229775-5), (LCS 160-601682/2-A), (MB 160-601682/1-A) and (500-229775-C-1-B DU)

Method 904.0: Radium-228 batch 601828

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

MW-01 (500-229775-6), MW-10 (500-229775-7), (LCS 160-601828/2-A), (MB 160-601828/1-A), (500-229829-E-11-B) and (500-229829-C-11-B DU)

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: Powerton CCR FAB (RAD)

Job ID: 500-229775-2

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: Powerton CCR FAB (RAD)

Job ID: 500-229775-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-229775-1	MW-02	Water	02/21/23 08:15	02/22/23 09:55
500-229775-2	MW-03	Water	02/21/23 09:27	02/22/23 09:55
500-229775-3	MW-04	Water	02/21/23 10:37	02/22/23 09:55
500-229775-4	MW-05	Water	02/21/23 11:36	02/22/23 09:55
500-229775-5	Duplicate	Water	02/21/23 00:00	02/22/23 09:55
500-229775-6	MW-01	Water	02/22/23 10:22	02/23/23 09:50
500-229775-7	MW-10	Water	02/22/23 09:27	02/23/23 09:50

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# Client Sample Results

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

Job ID: 500-229775-2

**Client Sample ID: MW-02**

**Lab Sample ID: 500-229775-1**

Date Collected: 02/21/23 08:15

Matrix: Water

Date Received: 02/22/23 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	0.0454	U	0.0575	0.0576	1.00	0.0953	pCi/L	02/27/23 10:06	03/21/23 21:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.7		30 - 110					02/27/23 10:06	03/21/23 21:21	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	0.208	U	0.331	0.332	1.00	0.563	pCi/L	02/27/23 10:24	03/07/23 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.7		30 - 110					02/27/23 10:24	03/07/23 12:07	1
Y Carrier	85.6		30 - 110					02/27/23 10:24	03/07/23 12:07	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.253	U	0.336	0.337	5.00	0.563	pCi/L		03/23/23 12:09	1

# Client Sample Results

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

Job ID: 500-229775-2

**Client Sample ID: MW-03**

**Lab Sample ID: 500-229775-2**

Date Collected: 02/21/23 09:27

Matrix: Water

Date Received: 02/22/23 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	0.0129	U	0.0424	0.0424	1.00	0.0823	pCi/L	02/27/23 10:06	03/22/23 07:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					02/27/23 10:06	03/22/23 07:40	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	0.241	U	0.298	0.298	1.00	0.493	pCi/L	02/27/23 10:24	03/07/23 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					02/27/23 10:24	03/07/23 12:08	1
Y Carrier	85.2		30 - 110					02/27/23 10:24	03/07/23 12:08	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.254	U	0.301	0.301	5.00	0.493	pCi/L		03/23/23 12:09	1

# Client Sample Results

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

Job ID: 500-229775-2

**Client Sample ID: MW-04**

**Lab Sample ID: 500-229775-3**

Date Collected: 02/21/23 10:37

Matrix: Water

Date Received: 02/22/23 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	0.0415	U	0.0749	0.0750	1.00	0.130	pCi/L	02/27/23 10:06	03/22/23 07:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		30 - 110					02/27/23 10:06	03/22/23 07:40	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	0.257	U	0.340	0.340	1.00	0.567	pCi/L	02/27/23 10:24	03/07/23 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		30 - 110					02/27/23 10:24	03/07/23 12:08	1
Y Carrier	80.7		30 - 110					02/27/23 10:24	03/07/23 12:08	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.299	U	0.348	0.348	5.00	0.567	pCi/L		03/23/23 12:09	1

# Client Sample Results

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

Job ID: 500-229775-2

**Client Sample ID: MW-05**

**Lab Sample ID: 500-229775-4**

Date Collected: 02/21/23 11:36

Matrix: Water

Date Received: 02/22/23 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	-0.0164	U	0.0502	0.0502	1.00	0.109	pCi/L	02/27/23 10:06	03/22/23 07:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		30 - 110					02/27/23 10:06	03/22/23 07:40	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	0.359	U	0.332	0.334	1.00	0.528	pCi/L	02/27/23 10:24	03/07/23 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		30 - 110					02/27/23 10:24	03/07/23 12:08	1
Y Carrier	86.0		30 - 110					02/27/23 10:24	03/07/23 12:08	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.342	U	0.336	0.338	5.00	0.528	pCi/L		03/23/23 12:09	1



# Client Sample Results

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

Job ID: 500-229775-2

**Client Sample ID: Duplicate**

**Lab Sample ID: 500-229775-5**

**Date Collected: 02/21/23 00:00**

**Matrix: Water**

**Date Received: 02/22/23 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	0.0447	U	0.0571	0.0572	1.00	0.0944	pCi/L	02/27/23 10:06	03/22/23 07:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.6		30 - 110					02/27/23 10:06	03/22/23 07:45	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	0.180	U	0.381	0.381	1.00	0.669	pCi/L	02/27/23 10:24	03/07/23 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.6		30 - 110					02/27/23 10:24	03/07/23 12:08	1
Y Carrier	78.1		30 - 110					02/27/23 10:24	03/07/23 12:08	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.225	U	0.385	0.385	5.00	0.669	pCi/L		03/23/23 12:09	1

# Client Sample Results

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

Job ID: 500-229775-2

**Client Sample ID: MW-01**

**Lab Sample ID: 500-229775-6**

Date Collected: 02/22/23 10:22

Matrix: Water

Date Received: 02/23/23 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	0.0894	U	0.0707	0.0712	1.00	0.104	pCi/L	02/28/23 09:01	03/22/23 20:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		30 - 110					02/28/23 09:01	03/22/23 20:50	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	0.333	U	0.315	0.317	1.00	0.503	pCi/L	02/28/23 09:47	03/08/23 12:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		30 - 110					02/28/23 09:47	03/08/23 12:00	1
Y Carrier	87.5		30 - 110					02/28/23 09:47	03/08/23 12:00	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	0.422	U	0.323	0.325	5.00	0.503	pCi/L		03/23/23 16:56	1

# Client Sample Results

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

Job ID: 500-229775-2

**Client Sample ID: MW-10**

**Lab Sample ID: 500-229775-7**

Date Collected: 02/22/23 09:27

Matrix: Water

Date Received: 02/23/23 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	0.315		0.111	0.114	1.00	0.105	pCi/L	02/28/23 09:01	03/22/23 20:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.3		30 - 110					02/28/23 09:01	03/22/23 20:50	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	0.438	U	0.386	0.388	1.00	0.608	pCi/L	02/28/23 09:47	03/08/23 12:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.3		30 - 110					02/28/23 09:47	03/08/23 12:01	1
Y Carrier	86.0		30 - 110					02/28/23 09:47	03/08/23 12:01	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	0.753		0.402	0.404	5.00	0.608	pCi/L		03/23/23 16:56	1

# Definitions/Glossary

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

Job ID: 500-229775-2

## 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: Powerton CCR FAB (RAD)

Job ID: 500-229775-2

## Rad

### Prep Batch: 601677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total/NA	Water	PrecSep-21	
500-229775-2	MW-03	Total/NA	Water	PrecSep-21	
500-229775-3	MW-04	Total/NA	Water	PrecSep-21	
500-229775-4	MW-05	Total/NA	Water	PrecSep-21	
500-229775-5	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-601677/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-601677/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-229775-1 DU	MW-02	Total/NA	Water	PrecSep-21	

### Prep Batch: 601682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total/NA	Water	PrecSep_0	
500-229775-2	MW-03	Total/NA	Water	PrecSep_0	
500-229775-3	MW-04	Total/NA	Water	PrecSep_0	
500-229775-4	MW-05	Total/NA	Water	PrecSep_0	
500-229775-5	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-601682/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-601682/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-229775-1 DU	MW-02	Total/NA	Water	PrecSep_0	

### Prep Batch: 601827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-6	MW-01	Total/NA	Water	PrecSep-21	
500-229775-7	MW-10	Total/NA	Water	PrecSep-21	
MB 160-601827/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-601827/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

### Prep Batch: 601828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-6	MW-01	Total/NA	Water	PrecSep_0	
500-229775-7	MW-10	Total/NA	Water	PrecSep_0	
MB 160-601828/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-601828/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

# QC Sample Results

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

Job ID: 500-229775-2

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

**Lab Sample ID: MB 160-601677/1-A**  
**Matrix: Water**  
**Analysis Batch: 604475**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 601677**

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.03437	U	0.0519	0.0520	1.00	0.119	pCi/L	02/27/23 10:06	03/21/23 19:11	1
Carrier	MB		Limits							
Ba Carrier	%Yield	MB Qualifier	30 - 110							
	92.9			Prepared	Analyzed	Dil Fac				
				02/27/23 10:06	03/21/23 19:11	1				

**Lab Sample ID: LCS 160-601677/2-A**  
**Matrix: Water**  
**Analysis Batch: 604475**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 601677**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits	
				Uncert. (2σ+/-)						
Radium-226	11.3	12.32		1.25	1.00	0.0902	pCi/L	109	75 - 125	
Carrier	LCS	LCS								
Ba Carrier	%Yield	Qualifier	Limits							
	91.5		30 - 110							

**Lab Sample ID: 500-229775-1 DU**  
**Matrix: Water**  
**Analysis Batch: 604712**

**Client Sample ID: MW-02**  
**Prep Type: Total/NA**  
**Prep Batch: 601677**

Analyte	Sample		DU	DU	Total	RL	MDC	Unit	RER	RER Limit	
	Result	Sample Qual	Result	Qual	Uncert. (2σ+/-)						
Radium-226	0.0454	U	0.05702	U	0.0551	1.00	0.0835	pCi/L	0.10	1	
Carrier	DU	DU									
Ba Carrier	%Yield	Qualifier	Limits								
	87.6		30 - 110								

**Lab Sample ID: MB 160-601827/1-A**  
**Matrix: Water**  
**Analysis Batch: 604715**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 601827**

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.008821	U	0.0567	0.0567	1.00	0.110	pCi/L	02/28/23 09:01	03/22/23 10:18	1
Carrier	MB		Limits							
Ba Carrier	%Yield	MB Qualifier	30 - 110							
	89.5			Prepared	Analyzed	Dil Fac				
				02/28/23 09:01	03/22/23 10:18	1				

**Lab Sample ID: LCS 160-601827/2-A**  
**Matrix: Water**  
**Analysis Batch: 604715**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 601827**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	12.40		1.26	1.00	0.107	pCi/L	109	75 - 125

Euromins Chicago

# QC Sample Results

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

Job ID: 500-229775-2

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

**Lab Sample ID: LCS 160-601827/2-A**  
**Matrix: Water**  
**Analysis Batch: 604715**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 601827**

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	88.4		30 - 110

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

**Lab Sample ID: MB 160-601682/1-A**  
**Matrix: Water**  
**Analysis Batch: 602704**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 601682**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.01265	U	0.269	0.269	1.00	0.509	pCi/L	02/27/23 10:24	03/07/23 12:04	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		30 - 110					02/27/23 10:24	03/07/23 12:04	1
Y Carrier	87.1		30 - 110					02/27/23 10:24	03/07/23 12:04	1

**Lab Sample ID: LCS 160-601682/2-A**  
**Matrix: Water**  
**Analysis Batch: 602704**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 601682**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	8.14	9.091		1.24	1.00	0.460	pCi/L	112	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	91.5		30 - 110						
Y Carrier	84.1		30 - 110						

**Lab Sample ID: 500-229775-1 DU**  
**Matrix: Water**  
**Analysis Batch: 602703**

**Client Sample ID: MW-02**  
**Prep Type: Total/NA**  
**Prep Batch: 601682**

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.208	U	0.2482	U	0.328	1.00	0.547	pCi/L	0.06	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	87.6		30 - 110							
Y Carrier	83.4		30 - 110							

**Lab Sample ID: MB 160-601828/1-A**  
**Matrix: Water**  
**Analysis Batch: 602826**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 601828**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1520	U	0.310	0.310	1.00	0.540	pCi/L	02/28/23 09:47	03/08/23 12:08	1

Eurofins Chicago

# QC Sample Results

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

Job ID: 500-229775-2

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

**Lab Sample ID: MB 160-601828/1-A**  
**Matrix: Water**  
**Analysis Batch: 602826**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 601828**

Carrier	MB MB		Limits
	%Yield	Qualifier	
Ba Carrier	89.5		30 - 110
Y Carrier	83.7		30 - 110

Prepared	Analyzed	Dil Fac
02/28/23 09:47	03/08/23 12:08	1
02/28/23 09:47	03/08/23 12:08	1

**Lab Sample ID: LCS 160-601828/2-A**  
**Matrix: Water**  
**Analysis Batch: 602861**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 601828**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec
									Limits
Radium-228	8.13	9.861		1.32	1.00	0.512	pCi/L	121	75 - 125

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	88.4		30 - 110
Y Carrier	85.2		30 - 110







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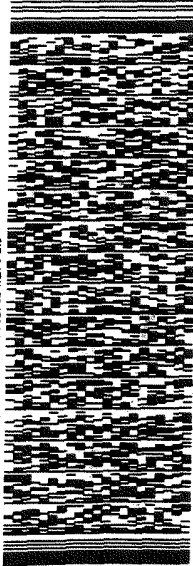
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KPRG AND ASSOCIATES  
414 PLAZA DR STE 106  
WESTMONT, IL 60559  
UNITED STATES US

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CAD: 6994780/SSFE2401  
DIMS: 24x13x14 IN  
BILL THIRD PARTY

TO EUROFINS CHICAGO  
EUROFINS CHICAGO  
2417 BOND ST

UNIVERSITY PARK IL 60484

(709) 584-5200 REF:  
YAU: DEPT:



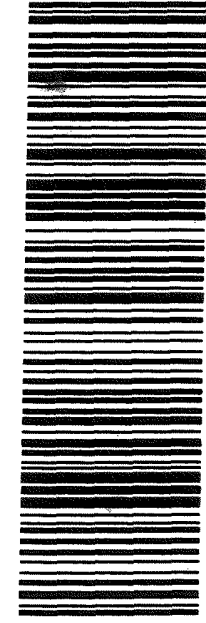
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PRIORITY OVERNIGHT  
AHS

**XN JOTA**

60484  
IL-US ORD



RT 519 5 10:30 A  
ST 7 1794 02:22

*us qt*

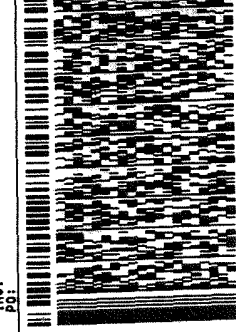
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KAE LIN SPERLE  
KPRG AND ASSOCIATES  
414 PLAZA DR STE 106  
WESTMONT, IL 60559  
UNITED STATES US

SHIP DATE: 21FEB23  
ACTWGT: 40.90 LB  
CAD: 6994780/SSFE2401  
DIMS: 24x13x14 IN  
BILL THIRD PARTY

TO EUROFINS CHICAGO  
EUROFINS CHICAGO  
2417 BOND ST

UNIVERSITY PARK IL 60484

(709) 584-5200 REF:  
YAU: DEPT:



REL# 3786346

1 of 5  
TRK# 3948 9886 1761  
0201  
## MASTER ##

WED - 22 FEB 10:30  
PRIORITY OVERNIGHT  
AH

**XN JOTA**

6048  
IL-US OR



RT 519 5 10:30 A  
ST 7 1761 02:22

500-229775 Waybi



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ORIGIN ID:PIAA (262) 278-1621  
KAELYN SPERLE  
KPRG AND ASSOCIATES  
414 PLAZA DR STE 106

WESTMONT, IL 60559  
UNITED STATES US

SHIP DATE: 22FEB23  
ACTNGT: 42.80 LB  
CAD: 6994780/SSFE2401  
DIMS: 24x14x14 IN

BILL THIRD PARTY

Part # 1562362136200210138E-XP 09/23

24QT



500 229775 Waybi

TO **EUROFINS**

**2417 BOND. ST.**

**UNIVERSITY PARK IL 60484**

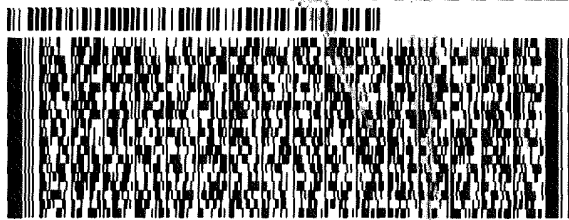
(708) 634-6200

REF:

INU:

PO:

DEPT:



**FedEx**  
Express



REL#  
3785346

2 of 3

MPS# **3949 4676 8910**

Mstr# 3949 4676 8909

0201

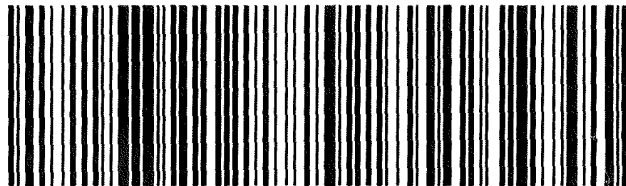
**THU - 23 FEB 10:30A**  
**PRIORITY OVERNIGHT**

AHS

**60484**

IL-US **ORD**

**XN JOTA**



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<b>Client Information (Sub Contract Lab)</b> Shipping/Receiving Company: TestAmerica Laboratories, Inc. Address: 13715 Rider Trail North, City: Earth City State, Zip: MO, 63045 Phone: 314-298-8566(Tel) 314-298-8757(Fax) Email: Project Name: Powerion CCR FAB (RAD) Site: MWG - Powerion		Lab PM: Mockler, Diana J E-Mail: Diana.Mockler@et.eurofins.com Accreditations Required (See note): NELAP - Illinois		Camer Tracking No(s): State of Origin: Illinois		COC No: 500-171178-1 Page: 1 of 1 Job #: 500-229775-2	
Due Date Requested: 3/14/2023 TAT Requested (days): PO #: WO #: Project #: 50011612 SSO#:		Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> X Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> X 903.0/PreSep_21 Standard Target List <input checked="" type="checkbox"/> X 904.0/PreSep_0 Standard Target List <input checked="" type="checkbox"/> X Ra26Ra228 GFPC		Analysis Requested Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - Trizma Y - EDTA Z - other (specify) Other:		Special Instructions/Note: Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no	
<b>Sample Identification - Client ID (Lab ID)</b> MW-01 (500-229775-6) MW-10 (500-229775-7)		Sample Date 2/22/23 2/22/23		Sample Time 10:22 Central 09:27 Central		Sample Type (C=Comp, G=grab) Water Water	
Matrix (W=Water, S=Solid, O=Organic, BT=Tissue, A=Air)		Preservation Code: Water Water		Total Number of Containers 3 3		Special Instructions/Note: Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no	

Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Chicago attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago.

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

Relinquished by: <b>Stephanie Hernandez</b>	Date/Time: 2/23/23 1515	Company: <b>BEA</b>
Relinquished by: <b>Fedex</b>	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:

Received by: **Fedex** Date/Time:  
 Received by: **Diana Mockler** Date/Time: 2/24/23 0846  
 Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

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



# Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-229775-2

**Login Number: 229775**

**List Number: 1**

**Creator: James, Jeff A**

**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	1.6,1.5,-0.3
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: 500-229775-2

**Login Number: 229775**

**List Number: 2**

**Creator: Sharkey-Gonzalez, Briana L**

**List Source: Eurofins St. Louis**

**List Creation: 02/23/23 12:13 PM**

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





# Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-229775-2

**Login Number: 229775**

**List Number: 3**

**Creator: Sharkey-Gonzalez, Briana L**

**List Source: Eurofins St. Louis**

**List Creation: 02/27/23 12:20 PM**

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



# Lab Chronicle

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

Job ID: 500-229775-2

**Client Sample ID: MW-02**  
**Date Collected: 02/21/23 08:15**  
**Date Received: 02/22/23 09:55**

**Lab Sample ID: 500-229775-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			601677	DJP	EET SL	02/27/23 10:06
Total/NA	Analysis	903.0		1	604475	FLC	EET SL	03/21/23 21:21
Total/NA	Prep	PrecSep_0			601682	DJP	EET SL	02/27/23 10:24
Total/NA	Analysis	904.0		1	602703	SCB	EET SL	03/07/23 12:07
Total/NA	Analysis	Ra226_Ra228		1	604791	SCB	EET SL	03/23/23 12:09

**Client Sample ID: MW-03**  
**Date Collected: 02/21/23 09:27**  
**Date Received: 02/22/23 09:55**

**Lab Sample ID: 500-229775-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			601677	DJP	EET SL	02/27/23 10:06
Total/NA	Analysis	903.0		1	604712	FLC	EET SL	03/22/23 07:40
Total/NA	Prep	PrecSep_0			601682	DJP	EET SL	02/27/23 10:24
Total/NA	Analysis	904.0		1	602703	SCB	EET SL	03/07/23 12:08
Total/NA	Analysis	Ra226_Ra228		1	604791	SCB	EET SL	03/23/23 12:09

**Client Sample ID: MW-04**  
**Date Collected: 02/21/23 10:37**  
**Date Received: 02/22/23 09:55**

**Lab Sample ID: 500-229775-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			601677	DJP	EET SL	02/27/23 10:06
Total/NA	Analysis	903.0		1	604712	FLC	EET SL	03/22/23 07:40
Total/NA	Prep	PrecSep_0			601682	DJP	EET SL	02/27/23 10:24
Total/NA	Analysis	904.0		1	602703	SCB	EET SL	03/07/23 12:08
Total/NA	Analysis	Ra226_Ra228		1	604791	SCB	EET SL	03/23/23 12:09

**Client Sample ID: MW-05**  
**Date Collected: 02/21/23 11:36**  
**Date Received: 02/22/23 09:55**

**Lab Sample ID: 500-229775-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			601677	DJP	EET SL	02/27/23 10:06
Total/NA	Analysis	903.0		1	604712	FLC	EET SL	03/22/23 07:40
Total/NA	Prep	PrecSep_0			601682	DJP	EET SL	02/27/23 10:24
Total/NA	Analysis	904.0		1	602703	SCB	EET SL	03/07/23 12:08
Total/NA	Analysis	Ra226_Ra228		1	604791	SCB	EET SL	03/23/23 12:09

# Lab Chronicle

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

Job ID: 500-229775-2

**Client Sample ID: Duplicate**

**Lab Sample ID: 500-229775-5**

**Date Collected: 02/21/23 00:00**

**Matrix: Water**

**Date Received: 02/22/23 09:55**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			601677	DJP	EET SL	02/27/23 10:06
Total/NA	Analysis	903.0		1	604712	FLC	EET SL	03/22/23 07:45
Total/NA	Prep	PrecSep_0			601682	DJP	EET SL	02/27/23 10:24
Total/NA	Analysis	904.0		1	602703	SCB	EET SL	03/07/23 12:08
Total/NA	Analysis	Ra226_Ra228		1	604791	SCB	EET SL	03/23/23 12:09

**Client Sample ID: MW-01**

**Lab Sample ID: 500-229775-6**

**Date Collected: 02/22/23 10:22**

**Matrix: Water**

**Date Received: 02/23/23 09:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			601827	DJP	EET SL	02/28/23 09:01
Total/NA	Analysis	903.0		1	604715	FLC	EET SL	03/22/23 20:50
Total/NA	Prep	PrecSep_0			601828	DJP	EET SL	02/28/23 09:47
Total/NA	Analysis	904.0		1	602825	FLC	EET SL	03/08/23 12:00
Total/NA	Analysis	Ra226_Ra228		1	604834	SCB	EET SL	03/23/23 16:56

**Client Sample ID: MW-10**

**Lab Sample ID: 500-229775-7**

**Date Collected: 02/22/23 09:27**

**Matrix: Water**

**Date Received: 02/23/23 09:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			601827	DJP	EET SL	02/28/23 09:01
Total/NA	Analysis	903.0		1	604715	FLC	EET SL	03/22/23 20:50
Total/NA	Prep	PrecSep_0			601828	DJP	EET SL	02/28/23 09:47
Total/NA	Analysis	904.0		1	602825	FLC	EET SL	03/08/23 12:01
Total/NA	Analysis	Ra226_Ra228		1	604834	SCB	EET SL	03/23/23 16:56

**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: Powerton CCR FAB (RAD)

Job ID: 500-229775-2

## Laboratory: Eurofins St. Louis

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	200023	11-30-23

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# Tracer/Carrier Summary

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

Job ID: 500-229775-2

## 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)
500-229775-1	MW-02	88.7
500-229775-1 DU	MW-02	87.6
500-229775-2	MW-03	92.4
500-229775-3	MW-04	88.1
500-229775-4	MW-05	90.1
500-229775-5	Duplicate	74.6
500-229775-6	MW-01	91.5
500-229775-7	MW-10	76.3
LCS 160-601677/2-A	Lab Control Sample	91.5
LCS 160-601827/2-A	Lab Control Sample	88.4
MB 160-601677/1-A	Method Blank	92.9
MB 160-601827/1-A	Method Blank	89.5

#### Tracer/Carrier Legend

Ba = Ba Carrier

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

Matrix: Water

Prep Type: Total/NA

### Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
500-229775-1	MW-02	88.7	85.6
500-229775-1 DU	MW-02	87.6	83.4
500-229775-2	MW-03	92.4	85.2
500-229775-3	MW-04	88.1	80.7
500-229775-4	MW-05	90.1	86.0
500-229775-5	Duplicate	74.6	78.1
500-229775-6	MW-01	91.5	87.5
500-229775-7	MW-10	76.3	86.0
LCS 160-601682/2-A	Lab Control Sample	91.5	84.1
LCS 160-601828/2-A	Lab Control Sample	88.4	85.2
MB 160-601682/1-A	Method Blank	92.9	87.1
MB 160-601828/1-A	Method Blank	89.5	83.7

#### Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

PROJECT NAME	NRG - POWERTON STATION - 12313.1		DATE	2/21/23
Sample Name	MW-02	Start Time	0800	
Condition of Well	good			
Water Level	27.10	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow Bladder Pump	Purge Characteristics	Clear	
Volume Removed	6 gts	WL at Sample Time	27.11	
Method of Sample	Low-Flow Bladder Pump	Sample Characteristics	Clear	
Sample Analysis	CCA & CCR FAB	Sample Time	0815	
Water Quality Meter	YSI Pro Dss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
0802	27.10	7.82	11.7	.903	8.53	132.5	3.56
0805	-	7.70	12.1	.946	5.80	142.0	3.00
0808	-	7.67	12.1	.949	4.95	142.6	2.90
0811	-	7.64	12.2	.947	4.39	141.1	2.56
0814	27.11	7.64	12.1	.951	4.24	140.2	2.63

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

KLS

PROJECT NAME	NRG - POWERTON STATION - 12313.1		DATE	2/21/23
Sample Name	MW-03	Start Time	0911	
Condition of Well	good			
Water Level	28.41	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow Bladder Pump	Purge Characteristics	clear	
Volume Removed	4.5 gts	WL at Sample Time	28.42	
Method of Sample	Low-Flow Bladder Pump	Sample Characteristics	clear	
Sample Analysis	CCA & CCR FAB	Sample Time	0927	
Water Quality Meter	YSI Pro Dss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
0914	28.41	9.81	11.3	.752	9.21	102.9	2.77
0917	-	8.33	11.4	.835	5.15	125.7	2.77
0920	-	7.94	11.4	.837	2.93	125.7	2.45
0923	-	7.78	11.6	.837	2.05	125.9	2.37
0926	28.42	7.75	11.4	.837	1.62	125.6	2.33

SAMPLING NOTES:

CCR FAB duplicate

Sampler Name and Company:

KPRG and Associates

KLS

PROJECT NAME	NRG - POWERTON STATION - 12313.1		DATE	2/21/23
Sample Name	MW-04	Start Time	1022	
Condition of Well	good			
Water Level	26.45	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow Bladder Pump	Purge Characteristics	clear	
Volume Removed	4.5 gts	WL at Sample Time	28.42	
Method of Sample	Low-Flow Bladder Pump	Sample Characteristics	clear	
Sample Analysis	CCA & CCR FAB	Sample Time	1037	
Water Quality Meter	YSI Pro Dss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
1024	26.45	8.40	11.8	.955	9.05	129.8	4.40
1027	-	7.66	13.8	.846	8.33	126.7	4.13
1030	-	7.60	13.9	.839	8.04	126.2	3.24
1033	-	7.60	14.1	.839	7.97	126.0	4.74
1036	28.42	7.58	14.1	.839	7.58	125.7	3.70

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

KLS



PROJECT NAME	NRG - POWERTON STATION - 12313.1		DATE	2/21/23
Sample Name	MW-05	Start Time	1120	
Condition of Well	good			
Water Level	23.72	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow Bladder Pump	Purge Characteristics	Clear	
Volume Removed	5.5 gts	WL at Sample Time	23.72	
Method of Sample	Low-Flow Bladder Pump	Sample Characteristics	clear	
Sample Analysis	CCA & CCR FAB	Sample Time	1136	
Water Quality Meter	YSI Pro Dss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
1123	23.72	7.41	12.3	983	5.95	127.2	2.19
1126	-	7.27	13.7	1.181	3.28	131.0	3.08
1129	-	7.30	13.8	1.183	2.36	131.3	2.36
1132	-	7.31	13.9	1.180	1.91	131.1	2.26
1135	23.72	7.34	13.7	1.175	1.62	131.2	2.16

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

KLS

PROJECT NAME	NRG - POWERTON STATION - 12313.1		DATE	2/22/23
Sample Name	MW-10	Start Time	0910	
Condition of Well	good			
Water Level	18.65	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow Bladder Pump	Purge Characteristics	clear	
Volume Removed	7 gals	WL at Sample Time	18.65	
Method of Sample	Low-Flow Bladder Pump	Sample Characteristics		
Sample Analysis	CCA & CCRFAB	Sample Time	0927	
Water Quality Meter	YSI Pro Dss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
0914	18.65	7.93	12.8	.847	5.86	95.3	17.03
0917	-	7.78	12.8	.866	2.65	103.7	18.96
0920	-	7.64	12.8	.875	1.76	106.7	18.73
0923	-	7.60	12.8	.881	1.47	107.6	16.10
0926	18.65	7.57	12.8	.882	1.33	108.8	14.31

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

KLS

PROJECT NAME	NRG - POWERTON STATION - 12313.1		DATE	2/22/23
Sample Name	MW-01	Start Time	1007	
Condition of Well	good			
Water Level	26.91	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow Bladder Pump	Purge Characteristics	clear	
Volume Removed	5 gts	WL at Sample Time	26.91	
Method of Sample	Low-Flow Bladder Pump	Sample Characteristics	clear	
Sample Analysis	CCA, CCR FAB & ABBASB	Sample Time	1022	
Water Quality Meter	YSI Pro Dss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
1009	26.91	7.68	10.3	.924	8.77	107.9	2.56
1012	-	7.51	11.9	.931	7.23	109.5	5.96
1015	-	7.51	12.0	.926	6.61	110.5	5.61
1018	-	7.51	12.0	.923	6.32	110.9	4.62
1021	26.91	7.51	12.0	.922	6.13	111.8	4.54

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

KLS