

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 4th quarter 2021 which includes the entire list of parameters specified under Section 845.600(a)(1) and (b). Table 1 is a summary table of all available CCR monitoring data to date including any data generated previously as part of the Federal CCR Rule monitoring. In addition, Table 2 provides a summary of turbidity data which was collected as part of State CCR Rule requirements which is a data parameter that was not required under the Federal CCR Rule.

No background statistics or proposed Groundwater Protection Standards are included on these tables. 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	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228	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		
MW-10 up-gradient	6/22/2017	0.46	100	48	0.19	6.81	54	1.0	< 0.003	0.0023	0.250	< 0.001	< 0.0005	< 0.005	0.008	0.0003	< 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	0.20	< 0.001	< 0.0005	< 0.005	0.004	0.0005	0.0031	< 0.0002	< 0.005	1.39	< 0.0025	< 0.002		
MW-02 down-gradient	6/20/2017	0.33	90	55	0.19	7.01	47	500	< 0.003	0.0012	0.075	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.341	< 0.0025	< 0.002	
	8/23/2017	V	1.30	86	49	0.19	7.40	61	440	< 0.003	< 0.001	0.062	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	0.833	< 0.0025	< 0.002
	11/7/2017		3.70	98	46	0.17	7.10	88	550	< 0.003	0.0014	0.091	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.309	0.0027	< 0.002
	5/15/2018	0.22	80	45	0.23	7.71	54	500	< 0.003	0.0013	0.065	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	0.0004	< 0.005	< 0.408	< 0.0025	< 0.002	
	8/7/2018	1.50	89	54	0.15	7.09	51	530	< 0.003	0.0016	0.067	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	0.622	< 0.0025	< 0.002	
	10/30/2018	0.23	86	43	0.17	7.83	34	480	< 0.003	0.0015	0.067	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	0.564	< 0.0025	< 0.002	
	2/26/2019	0.07	69	49	0.16	7.82	23	400	< 0.003	0.0026	0.041	< 0.001	< 0.0005	< 0.005	< 0.001	0.0013	< 0.01	< 0.0002	< 0.005	< 0.425	< 0.0025	< 0.002	
	4/30/2019	0.12	79	48	0.16	7.60	30	440	< 0.003	0.0013	0.048	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.441	< 0.0025	< 0.002	
	8/26/2019	0.51	86	50	0.18	7.13	32	400	< 0.003	0.0011	0.065	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	1.180	< 0.0025	< 0.002	
	2/24/2020	0.33	89	53	0.20	7.43	37	410	< 0.003	0.0011	0.061												

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	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228	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	0.001	0.063	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.004	< 0.0002	< 0.005	< 0.436	< 0.0025	< 0.002	
MW-04 down-gradient	6/20/2017	0.5	77	55	0.29	7.45	53	480	< 0.003	< 0.001	0.0225	< 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 0.73	90	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	0.25	6.95	62	560	< 0.003	0.001	0.035	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.0035	< 0.0002	< 0.005	< 0.419	< 0.0025	< 0.002	
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	0.00091	< 0.01	< 0.0002	< 0.005	< 0.359	< 0.0025	< 0.002
	5/1/2017	0.70	100	92	0.28	7.60	170	710	< 0.003	< 0.001	0.059	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0066	< 0.439	< 0.0025	< 0.002
	6/20/2017	0.64	89	63	0.28	7.32	78	550	< 0.003	< 0.001	0.048	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0061	< 0.365	< 0.0025	< 0.002
	8/28/2017	0.62	110	120	0.33	7.05	210	870	< 0.003	< 0.001	0.064	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0085	0.381	< 0.0025	< 0.002
	11/7/2017	0.51	99	110	0.31	6.87	160	990	< 0.003	< 0.001	0.058	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.341	< 0.0025	< 0.002
	5/15/2018	0.61	130	89	0.29	7.70	210	910	< 0.003	< 0.001	0.062	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.390	< 0.0025	< 0.002
	8/7/2018	0.49	110	120	0.32	6.56	180	890	< 0.003	< 0.001	0.054	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0069	0.523	< 0.0025	< 0.002
	4/30/2019	0.56	84	73	0.36	6.96	120	590	< 0.003	< 0.001	0.041	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0061	< 0.709	< 0.0025	< 0.002
	8/26/2019	0.57	110	75	0.29	7.01	110	660	< 0.003	< 0.001	0.050	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0067	0.651	< 0.0025	< 0.002
	2/24/2020	0.54	110	70	0.36	6.90	120	H 700	< 0.003	< 0.001	0.057	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.0061	0.506	< 0.0025	< 0.002
	4/28/2020	0.49	110	56	0.37	6.87	130	620	NA	0.001	0.052	NA	NA	< 0.005	< 0.001	< 0.0005						

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	
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	
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	
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	
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	
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	

ANALYTICAL REPORT

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

Laboratory Job ID: 500-209156-1
Client Project/Site: Powerton CCR FAB

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

Attn: Richard Gnat



Authorized for release by:
12/21/2021 12:32:44 PM

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

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.eurofinsus.com/Env

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

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



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Method Summary	4
Sample Summary	5
Client Sample Results	6
Definitions	13
QC Association	14
QC Sample Results	16
Chain of Custody	19
Receipt Checklists	21
Chronicle	22
Certification Summary	25

Case Narrative

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

Job ID: 500-209156-1

Job ID: 500-209156-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-209156-1

Comments

No additional comments.

Receipt

The samples were received on 12/2/2021 10:25 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.7° C and 5.8° C.

Metals

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

General Chemistry

Methods 9038, SM 4500 SO4 E: The low level CCVs associated with the following samples recovered slightly below (87-89%) the lower control limit of 90%: MW-01 (500-209156-1), MW-02 (500-209156-2), MW-03 (500-209156-3), MW-04 (500-209156-4), MW-05 (500-209156-5), MW-10 (500-209156-6) and Duplicate (500-209156-7). These sample instrument responses were at a level greater than or equal to the LCS spiking level of 20 mg/L. The LCS and high level CCVH all met criteria; therefore, data has been flagged and reported.

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

Job ID: 500-209156-1

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

Protocol References:

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

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, 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: 500-209156-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-209156-1	MW-01	Water	11/30/21 11:15	12/02/21 10:25
500-209156-2	MW-02	Water	11/30/21 08:48	12/02/21 10:25
500-209156-3	MW-03	Water	11/30/21 09:51	12/02/21 10:25
500-209156-4	MW-04	Water	11/30/21 10:47	12/02/21 10:25
500-209156-5	MW-05	Water	11/30/21 11:40	12/02/21 10:25
500-209156-6	MW-10	Water	11/30/21 10:12	12/02/21 10:25
500-209156-7	Duplicate	Water	11/30/21 00:00	12/02/21 10:25

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

Client Sample Results

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

Job ID: 500-209156-1

Client Sample ID: MW-01
Date Collected: 11/30/21 11:15
Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		12/15/21 10:06	12/16/21 12:40	1
Arsenic	0.0010		0.0010		mg/L		12/15/21 10:06	12/16/21 12:40	1
Barium	0.052		0.0025		mg/L		12/15/21 10:06	12/16/21 12:40	1
Beryllium	<0.0010		0.0010		mg/L		12/15/21 10:06	12/16/21 12:40	1
Boron	0.35		0.050		mg/L		12/15/21 10:06	12/16/21 12:40	1
Cadmium	<0.00050		0.00050		mg/L		12/15/21 10:06	12/16/21 12:40	1
Calcium	84		0.20		mg/L		12/15/21 10:06	12/16/21 12:40	1
Chromium	<0.0050		0.0050		mg/L		12/15/21 10:06	12/16/21 12:40	1
Cobalt	<0.0010		0.0010		mg/L		12/15/21 10:06	12/16/21 12:40	1
Lead	<0.00050		0.00050		mg/L		12/15/21 10:06	12/16/21 12:40	1
Lithium	0.0038		0.0020		mg/L		12/15/21 10:06	12/16/21 12:40	1
Molybdenum	0.0068		0.0050		mg/L		12/15/21 10:06	12/16/21 12:40	1
Selenium	<0.0025		0.0025		mg/L		12/15/21 10:06	12/16/21 12:40	1
Thallium	<0.0020		0.0020		mg/L		12/15/21 10:06	12/16/21 12:40	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		12/07/21 10:05	12/08/21 08:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	400		10		mg/L			12/07/21 05:04	1
Chloride	41		6.0		mg/L			12/07/21 15:59	3
Fluoride	0.19		0.10		mg/L			12/20/21 16:47	1
Sulfate	28	^	5.0		mg/L			12/07/21 17:22	1

Client Sample Results

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

Job ID: 500-209156-1

Client Sample ID: MW-02

Lab Sample ID: 500-209156-2

Date Collected: 11/30/21 08:48

Matrix: Water

Date Received: 12/02/21 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		12/15/21 10:06	12/16/21 12:44	1
Arsenic	0.0017		0.0010		mg/L		12/15/21 10:06	12/16/21 12:44	1
Barium	0.065		0.0025		mg/L		12/15/21 10:06	12/16/21 12:44	1
Beryllium	<0.0010		0.0010		mg/L		12/15/21 10:06	12/16/21 12:44	1
Boron	0.22		0.050		mg/L		12/15/21 10:06	12/16/21 12:44	1
Cadmium	<0.00050		0.00050		mg/L		12/15/21 10:06	12/16/21 12:44	1
Calcium	87		0.20		mg/L		12/15/21 10:06	12/16/21 12:44	1
Chromium	<0.0050		0.0050		mg/L		12/15/21 10:06	12/16/21 12:44	1
Cobalt	<0.0010		0.0010		mg/L		12/15/21 10:06	12/16/21 12:44	1
Lead	<0.00050		0.00050		mg/L		12/15/21 10:06	12/16/21 12:44	1
Lithium	0.0045		0.0020		mg/L		12/15/21 10:06	12/16/21 12:44	1
Molybdenum	<0.0050		0.0050		mg/L		12/15/21 10:06	12/16/21 12:44	1
Selenium	<0.0025		0.0025		mg/L		12/15/21 10:06	12/16/21 12:44	1
Thallium	<0.0020		0.0020		mg/L		12/15/21 10:06	12/16/21 12:44	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		12/07/21 10:05	12/08/21 08:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	380		10		mg/L			12/07/21 05:06	1
Chloride	41		6.0		mg/L			12/07/21 15:41	3
Fluoride	0.14		0.10		mg/L			12/20/21 17:00	1
Sulfate	36	^	5.0		mg/L			12/07/21 17:22	1

Client Sample Results

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

Job ID: 500-209156-1

Client Sample ID: MW-03

Lab Sample ID: 500-209156-3

Date Collected: 11/30/21 09:51

Matrix: Water

Date Received: 12/02/21 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		12/15/21 10:06	12/16/21 12:47	1
Arsenic	0.0014		0.0010		mg/L		12/15/21 10:06	12/16/21 12:47	1
Barium	0.063		0.0025		mg/L		12/15/21 10:06	12/16/21 12:47	1
Beryllium	<0.0010		0.0010		mg/L		12/15/21 10:06	12/16/21 12:47	1
Boron	0.30		0.050		mg/L		12/15/21 10:06	12/16/21 12:47	1
Cadmium	<0.00050		0.00050		mg/L		12/15/21 10:06	12/16/21 12:47	1
Calcium	76		0.20		mg/L		12/15/21 10:06	12/16/21 12:47	1
Chromium	<0.0050		0.0050		mg/L		12/15/21 10:06	12/16/21 12:47	1
Cobalt	<0.0010		0.0010		mg/L		12/15/21 10:06	12/16/21 12:47	1
Lead	<0.00050		0.00050		mg/L		12/15/21 10:06	12/16/21 12:47	1
Lithium	0.0040		0.0020		mg/L		12/15/21 10:06	12/16/21 12:47	1
Molybdenum	<0.0050		0.0050		mg/L		12/15/21 10:06	12/16/21 12:47	1
Selenium	<0.0025		0.0025		mg/L		12/15/21 10:06	12/16/21 12:47	1
Thallium	<0.0020		0.0020		mg/L		12/15/21 10:06	12/16/21 12:47	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		12/07/21 10:05	12/08/21 09:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	350		10		mg/L			12/07/21 05:09	1
Chloride	47		6.0		mg/L			12/07/21 15:41	3
Fluoride	0.26		0.10		mg/L			12/20/21 17:03	1
Sulfate	23	^	5.0		mg/L			12/07/21 17:22	1

Client Sample Results

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

Job ID: 500-209156-1

Client Sample ID: MW-04

Lab Sample ID: 500-209156-4

Date Collected: 11/30/21 10:47

Matrix: Water

Date Received: 12/02/21 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		12/15/21 10:06	12/16/21 12:51	1
Arsenic	0.0012		0.0010		mg/L		12/15/21 10:06	12/16/21 12:51	1
Barium	0.035		0.0025		mg/L		12/15/21 10:06	12/16/21 12:51	1
Beryllium	<0.0010		0.0010		mg/L		12/15/21 10:06	12/16/21 12:51	1
Boron	0.51		0.050		mg/L		12/15/21 10:06	12/16/21 12:51	1
Cadmium	<0.00050		0.00050		mg/L		12/15/21 10:06	12/16/21 12:51	1
Calcium	99		0.20		mg/L		12/15/21 10:06	12/16/21 12:51	1
Chromium	<0.0050		0.0050		mg/L		12/15/21 10:06	12/16/21 12:51	1
Cobalt	<0.0010		0.0010		mg/L		12/15/21 10:06	12/16/21 12:51	1
Lead	<0.00050		0.00050		mg/L		12/15/21 10:06	12/16/21 12:51	1
Lithium	0.0035		0.0020		mg/L		12/15/21 10:06	12/16/21 12:51	1
Molybdenum	<0.0050		0.0050		mg/L		12/15/21 10:06	12/16/21 12:51	1
Selenium	<0.0025		0.0025		mg/L		12/15/21 10:06	12/16/21 12:51	1
Thallium	<0.0020		0.0020		mg/L		12/15/21 10:06	12/16/21 12:51	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		12/07/21 10:05	12/08/21 10:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	560		10		mg/L			12/07/21 05:12	1
Chloride	56		6.0		mg/L			12/07/21 15:41	3
Fluoride	0.25		0.10		mg/L			12/20/21 17:06	1
Sulfate	62	^	15		mg/L			12/07/21 17:23	3

Client Sample Results

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

Job ID: 500-209156-1

Client Sample ID: MW-05

Lab Sample ID: 500-209156-5

Date Collected: 11/30/21 11:40

Matrix: Water

Date Received: 12/02/21 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		12/15/21 10:06	12/16/21 12:54	1
Arsenic	0.0011		0.0010		mg/L		12/15/21 10:06	12/16/21 12:54	1
Barium	0.048		0.0025		mg/L		12/15/21 10:06	12/16/21 12:54	1
Beryllium	<0.0010		0.0010		mg/L		12/15/21 10:06	12/16/21 12:54	1
Boron	0.68		0.050		mg/L		12/15/21 10:06	12/16/21 12:54	1
Cadmium	<0.00050		0.00050		mg/L		12/15/21 10:06	12/16/21 12:54	1
Calcium	99		0.20		mg/L		12/15/21 10:06	12/16/21 12:54	1
Chromium	<0.0050		0.0050		mg/L		12/15/21 10:06	12/16/21 12:54	1
Cobalt	<0.0010		0.0010		mg/L		12/15/21 10:06	12/16/21 12:54	1
Lead	<0.00050		0.00050		mg/L		12/15/21 10:06	12/16/21 12:54	1
Lithium	0.0052		0.0020		mg/L		12/15/21 10:06	12/16/21 12:54	1
Molybdenum	0.0051		0.0050		mg/L		12/15/21 10:06	12/16/21 12:54	1
Selenium	<0.0025		0.0025		mg/L		12/15/21 10:06	12/16/21 12:54	1
Thallium	<0.0020		0.0020		mg/L		12/15/21 10:06	12/16/21 12:54	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		12/07/21 10:05	12/08/21 10:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	620		10		mg/L			12/07/21 05:14	1
Chloride	67		6.0		mg/L			12/07/21 15:42	3
Fluoride	0.30		0.10		mg/L			12/20/21 17:10	1
Sulfate	92	^	15		mg/L			12/07/21 17:23	3

Client Sample Results

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

Job ID: 500-209156-1

Client Sample ID: MW-10
Date Collected: 11/30/21 10:12
Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		12/15/21 10:06	12/16/21 12:58	1
Arsenic	0.0015		0.0010		mg/L		12/15/21 10:06	12/16/21 12:58	1
Barium	0.20		0.0025		mg/L		12/15/21 10:06	12/16/21 12:58	1
Beryllium	<0.0010		0.0010		mg/L		12/15/21 10:06	12/16/21 12:58	1
Boron	0.42		0.050		mg/L		12/15/21 10:06	12/16/21 12:58	1
Cadmium	<0.00050		0.00050		mg/L		12/15/21 10:06	12/16/21 12:58	1
Calcium	100		0.20		mg/L		12/15/21 10:06	12/16/21 12:58	1
Chromium	<0.0050		0.0050		mg/L		12/15/21 10:06	12/16/21 12:58	1
Cobalt	0.0037		0.0010		mg/L		12/15/21 10:06	12/16/21 12:58	1
Lead	0.00051		0.00050		mg/L		12/15/21 10:06	12/16/21 12:58	1
Lithium	0.0031		0.0020		mg/L		12/15/21 10:06	12/16/21 12:58	1
Molybdenum	<0.0050		0.0050		mg/L		12/15/21 10:06	12/16/21 12:58	1
Selenium	<0.0025		0.0025		mg/L		12/15/21 10:06	12/16/21 12:58	1
Thallium	<0.0020		0.0020		mg/L		12/15/21 10:06	12/16/21 12:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		12/07/21 10:05	12/08/21 10:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	530		10		mg/L			12/07/21 05:17	1
Chloride	47		6.0		mg/L			12/07/21 15:42	3
Fluoride	0.19		0.10		mg/L			12/20/21 17:13	1
Sulfate	36	^	5.0		mg/L			12/07/21 17:23	1

Client Sample Results

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

Job ID: 500-209156-1

Client Sample ID: Duplicate
Date Collected: 11/30/21 00:00
Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		12/15/21 10:06	12/16/21 13:01	1
Arsenic	0.0015		0.0010		mg/L		12/15/21 10:06	12/16/21 13:01	1
Barium	0.20		0.0025		mg/L		12/15/21 10:06	12/16/21 13:01	1
Beryllium	<0.0010		0.0010		mg/L		12/15/21 10:06	12/16/21 13:01	1
Boron	0.41		0.050		mg/L		12/15/21 10:06	12/16/21 13:01	1
Cadmium	<0.00050		0.00050		mg/L		12/15/21 10:06	12/16/21 13:01	1
Calcium	100		0.20		mg/L		12/15/21 10:06	12/16/21 13:01	1
Chromium	<0.0050		0.0050		mg/L		12/15/21 10:06	12/16/21 13:01	1
Cobalt	0.0033		0.0010		mg/L		12/15/21 10:06	12/16/21 13:01	1
Lead	0.00054		0.00050		mg/L		12/15/21 10:06	12/16/21 13:01	1
Lithium	0.0029		0.0020		mg/L		12/15/21 10:06	12/16/21 13:01	1
Molybdenum	<0.0050		0.0050		mg/L		12/15/21 10:06	12/16/21 13:01	1
Selenium	<0.0025		0.0025		mg/L		12/15/21 10:06	12/16/21 13:01	1
Thallium	<0.0020		0.0020		mg/L		12/15/21 10:06	12/16/21 13:01	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		12/07/21 10:05	12/08/21 10:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	500		10		mg/L			12/06/21 03:12	1
Chloride	46		6.0		mg/L			12/07/21 15:43	3
Fluoride	0.19		0.10		mg/L			12/20/21 17:17	1
Sulfate	36	^	5.0		mg/L			12/07/21 17:23	1

Definitions/Glossary

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

Job ID: 500-209156-1

Qualifiers

General Chemistry

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

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: 500-209156-1

Metals

Prep Batch: 632458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209156-1	MW-01	Total/NA	Water	7470A	
500-209156-2	MW-02	Total/NA	Water	7470A	
500-209156-3	MW-03	Total/NA	Water	7470A	
500-209156-4	MW-04	Total/NA	Water	7470A	
500-209156-5	MW-05	Total/NA	Water	7470A	
500-209156-6	MW-10	Total/NA	Water	7470A	
500-209156-7	Duplicate	Total/NA	Water	7470A	
MB 500-632458/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-632458/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-209156-3 MS	MW-03	Total/NA	Water	7470A	
500-209156-3 MSD	MW-03	Total/NA	Water	7470A	
500-209156-3 DU	MW-03	Total/NA	Water	7470A	

Analysis Batch: 632735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209156-1	MW-01	Total/NA	Water	7470A	632458
500-209156-2	MW-02	Total/NA	Water	7470A	632458
500-209156-3	MW-03	Total/NA	Water	7470A	632458
500-209156-4	MW-04	Total/NA	Water	7470A	632458
500-209156-5	MW-05	Total/NA	Water	7470A	632458
500-209156-6	MW-10	Total/NA	Water	7470A	632458
500-209156-7	Duplicate	Total/NA	Water	7470A	632458
MB 500-632458/12-A	Method Blank	Total/NA	Water	7470A	632458
LCS 500-632458/13-A	Lab Control Sample	Total/NA	Water	7470A	632458
500-209156-3 MS	MW-03	Total/NA	Water	7470A	632458
500-209156-3 MSD	MW-03	Total/NA	Water	7470A	632458
500-209156-3 DU	MW-03	Total/NA	Water	7470A	632458

Prep Batch: 633814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209156-1	MW-01	Total Recoverable	Water	3005A	
500-209156-2	MW-02	Total Recoverable	Water	3005A	
500-209156-3	MW-03	Total Recoverable	Water	3005A	
500-209156-4	MW-04	Total Recoverable	Water	3005A	
500-209156-5	MW-05	Total Recoverable	Water	3005A	
500-209156-6	MW-10	Total Recoverable	Water	3005A	
500-209156-7	Duplicate	Total Recoverable	Water	3005A	
MB 500-633814/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-633814/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 634096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209156-1	MW-01	Total Recoverable	Water	6020A	633814
500-209156-2	MW-02	Total Recoverable	Water	6020A	633814
500-209156-3	MW-03	Total Recoverable	Water	6020A	633814
500-209156-4	MW-04	Total Recoverable	Water	6020A	633814
500-209156-5	MW-05	Total Recoverable	Water	6020A	633814
500-209156-6	MW-10	Total Recoverable	Water	6020A	633814
500-209156-7	Duplicate	Total Recoverable	Water	6020A	633814
MB 500-633814/1-A	Method Blank	Total Recoverable	Water	6020A	633814
LCS 500-633814/2-A	Lab Control Sample	Total Recoverable	Water	6020A	633814

Eurofins TestAmerica, Chicago

QC Association Summary

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

Job ID: 500-209156-1

General Chemistry

Analysis Batch: 632165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209156-7	Duplicate	Total/NA	Water	SM 2540C	
MB 500-632165/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-632165/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 632355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209156-1	MW-01	Total/NA	Water	SM 2540C	
500-209156-2	MW-02	Total/NA	Water	SM 2540C	
500-209156-3	MW-03	Total/NA	Water	SM 2540C	
500-209156-4	MW-04	Total/NA	Water	SM 2540C	
500-209156-5	MW-05	Total/NA	Water	SM 2540C	
500-209156-6	MW-10	Total/NA	Water	SM 2540C	
MB 500-632355/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-632355/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 632730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209156-1	MW-01	Total/NA	Water	SM 4500 Cl- E	
500-209156-2	MW-02	Total/NA	Water	SM 4500 Cl- E	
500-209156-3	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-209156-4	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-209156-5	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-209156-6	MW-10	Total/NA	Water	SM 4500 Cl- E	
500-209156-7	Duplicate	Total/NA	Water	SM 4500 Cl- E	
MB 500-632730/138	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-632730/139	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 632731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209156-1	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-209156-2	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-209156-3	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-209156-4	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-209156-5	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-209156-6	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-209156-7	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-632731/82	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-632731/83	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 634708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209156-1	MW-01	Total/NA	Water	SM 4500 F C	
500-209156-2	MW-02	Total/NA	Water	SM 4500 F C	
500-209156-3	MW-03	Total/NA	Water	SM 4500 F C	
500-209156-4	MW-04	Total/NA	Water	SM 4500 F C	
500-209156-5	MW-05	Total/NA	Water	SM 4500 F C	
500-209156-6	MW-10	Total/NA	Water	SM 4500 F C	
500-209156-7	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-634708/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-634708/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Eurofins TestAmerica, Chicago

QC Sample Results

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

Job ID: 500-209156-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-633814/1-A
Matrix: Water
Analysis Batch: 634096

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 633814

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		12/15/21 10:06	12/16/21 11:46	1
Arsenic	<0.0010		0.0010		mg/L		12/15/21 10:06	12/16/21 11:46	1
Barium	<0.0025		0.0025		mg/L		12/15/21 10:06	12/16/21 11:46	1
Beryllium	<0.0010		0.0010		mg/L		12/15/21 10:06	12/16/21 11:46	1
Boron	<0.050		0.050		mg/L		12/15/21 10:06	12/16/21 11:46	1
Cadmium	<0.00050		0.00050		mg/L		12/15/21 10:06	12/16/21 11:46	1
Calcium	<0.20		0.20		mg/L		12/15/21 10:06	12/16/21 11:46	1
Chromium	<0.0050		0.0050		mg/L		12/15/21 10:06	12/16/21 11:46	1
Cobalt	<0.0010		0.0010		mg/L		12/15/21 10:06	12/16/21 11:46	1
Lead	<0.00050		0.00050		mg/L		12/15/21 10:06	12/16/21 11:46	1
Lithium	<0.0020		0.0020		mg/L		12/15/21 10:06	12/16/21 11:46	1
Molybdenum	<0.0050		0.0050		mg/L		12/15/21 10:06	12/16/21 11:46	1
Selenium	<0.0025		0.0025		mg/L		12/15/21 10:06	12/16/21 11:46	1
Thallium	<0.0020		0.0020		mg/L		12/15/21 10:06	12/16/21 11:46	1

Lab Sample ID: LCS 500-633814/2-A
Matrix: Water
Analysis Batch: 634096

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 633814

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.521		mg/L		104	80 - 120
Arsenic	0.100	0.103		mg/L		103	80 - 120
Barium	2.00	2.10		mg/L		105	80 - 120
Beryllium	0.0500	0.0524		mg/L		105	80 - 120
Boron	1.00	1.04		mg/L		104	80 - 120
Cadmium	0.0500	0.0517		mg/L		103	80 - 120
Calcium	10.0	9.96		mg/L		100	80 - 120
Chromium	0.200	0.212		mg/L		106	80 - 120
Cobalt	0.500	0.523		mg/L		105	80 - 120
Lead	0.100	0.111		mg/L		111	80 - 120
Lithium	0.500	0.537		mg/L		107	80 - 120
Molybdenum	1.00	1.02		mg/L		102	80 - 120
Selenium	0.100	0.105		mg/L		105	80 - 120
Thallium	0.100	0.112		mg/L		112	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-632458/12-A
Matrix: Water
Analysis Batch: 632735

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632458

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		12/07/21 10:05	12/08/21 08:12	1

QC Sample Results

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

Job ID: 500-209156-1

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

Lab Sample ID: LCS 500-632458/13-A
Matrix: Water
Analysis Batch: 632735

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632458
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00198		mg/L		99	80 - 120

Lab Sample ID: 500-209156-3 MS
Matrix: Water
Analysis Batch: 632735

Client Sample ID: MW-03
Prep Type: Total/NA
Prep Batch: 632458
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00020		0.00100	0.00112		mg/L		112	75 - 125

Lab Sample ID: 500-209156-3 MSD
Matrix: Water
Analysis Batch: 632735

Client Sample ID: MW-03
Prep Type: Total/NA
Prep Batch: 632458
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.00020		0.00100	0.00101		mg/L		101	75 - 125	10	20

Lab Sample ID: 500-209156-3 DU
Matrix: Water
Analysis Batch: 632735

Client Sample ID: MW-03
Prep Type: Total/NA
Prep Batch: 632458
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.00020			<0.00020		mg/L				NC	20

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

Lab Sample ID: MB 500-632165/1
Matrix: Water
Analysis Batch: 632165

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			12/06/21 02:18	1

Lab Sample ID: LCS 500-632165/2
Matrix: Water
Analysis Batch: 632165

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Total Dissolved Solids	250	256		mg/L		102	80 - 120

Lab Sample ID: MB 500-632355/1
Matrix: Water
Analysis Batch: 632355

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			12/07/21 04:41	1

QC Sample Results

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

Job ID: 500-209156-1

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

Lab Sample ID: LCS 500-632355/2
Matrix: Water
Analysis Batch: 632355

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	250		mg/L		100	80 - 120

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-632730/138
Matrix: Water
Analysis Batch: 632730

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			12/07/21 15:35	1

Lab Sample ID: LCS 500-632730/139
Matrix: Water
Analysis Batch: 632730

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

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

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-634708/3
Matrix: Water
Analysis Batch: 634708

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			12/20/21 16:19	1

Lab Sample ID: LCS 500-634708/4
Matrix: Water
Analysis Batch: 634708

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	10.9		mg/L		109	90 - 119

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-632731/82
Matrix: Water
Analysis Batch: 632731

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			12/07/21 17:17	1

Lab Sample ID: LCS 500-632731/83
Matrix: Water
Analysis Batch: 632731

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	20.7	^	mg/L		104	88 - 123

Eurofins TestAmerica, Chicago

ORIGIN ID:PIAA (000) 000-0000
KPRG AND ASSOCIATES
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 30NOV21
ACTWTG: 42.50 LB
CAD: 6994779/SSFE2220
DIMS: 24x18x12 IN
BILL THIRD PARTY

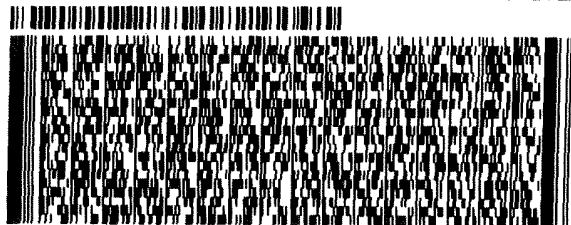
Part # 156297-435 FRDW2 EXP 04/22

TO **SAMPLE RECEIVING**
EUROFINS
2417 BOND ST

5.8

UNIVERSITY PARK IL 60484

(000) 000-0000 REF: DEPT:
INU: PO:



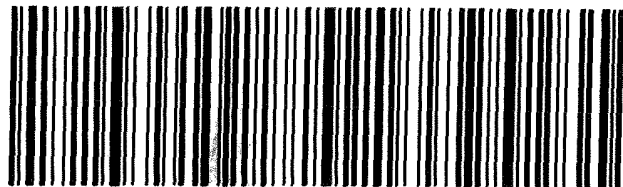
2 of 4
MPS# 2868 3527 8401
0263
Metr# 2868 3527 8397

THU - 02 DEC 4:30P
** 2DAY **

0201

TT JOTA

60484
IL-US ORD



ORIGIN ID:PIAA (000) 000-0000
KPRG AND ASSOCIATES
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 30NOV21
ACTWTG: 42.50 LB
CAD: 6994779/SSFE2220
DIMS: 24x18x12 IN
BILL THIRD PARTY

Part # 156297-435 FRDW2 EXP 04/22

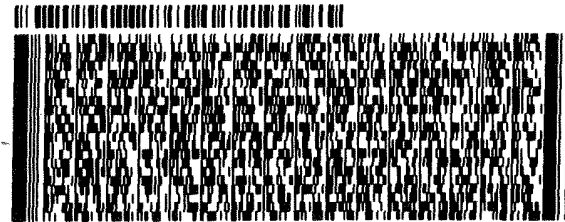
TO **SAMPLE RECEIVING**
EUROFINS
2417 BOND ST



UNIVERSITY PARK IL 60484

500-209156 Wayb

(000) 000-0000 REF: DEPT:
INU: PO:



4 of 4
MPS# 2868 3527 8423
0263
Metr# 2868 3527 8397

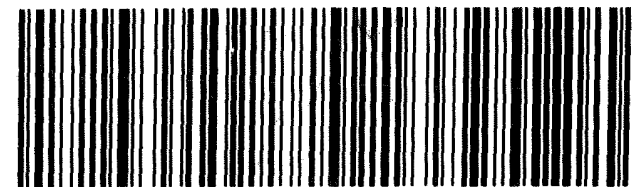
THU - 02 DEC 4:30P
** 2DAY **

0201

TT JOTA

1.7

60484
IL-US ORD



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-209156-1

Login Number: 209156

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Hernandez, Stephanie

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.8,1.7
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: 500-209156-1

Client Sample ID: MW-01
Date Collected: 11/30/21 11:15
Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			633814	12/15/21 10:06	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	634096	12/16/21 12:40	FXG	TAL CHI
Total/NA	Prep	7470A			632458	12/07/21 10:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	632735	12/08/21 08:27	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	632355	12/07/21 05:04	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		3	632730	12/07/21 15:59	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	634708	12/20/21 16:47	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		1	632731	12/07/21 17:22	RES	TAL CHI

Client Sample ID: MW-02
Date Collected: 11/30/21 08:48
Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			633814	12/15/21 10:06	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	634096	12/16/21 12:44	FXG	TAL CHI
Total/NA	Prep	7470A			632458	12/07/21 10:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	632735	12/08/21 08:29	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	632355	12/07/21 05:06	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		3	632730	12/07/21 15:41	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	634708	12/20/21 17:00	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		1	632731	12/07/21 17:22	RES	TAL CHI

Client Sample ID: MW-03
Date Collected: 11/30/21 09:51
Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			633814	12/15/21 10:06	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	634096	12/16/21 12:47	FXG	TAL CHI
Total/NA	Prep	7470A			632458	12/07/21 10:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	632735	12/08/21 09:32	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	632355	12/07/21 05:09	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		3	632730	12/07/21 15:41	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	634708	12/20/21 17:03	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		1	632731	12/07/21 17:22	RES	TAL CHI

Client Sample ID: MW-04
Date Collected: 11/30/21 10:47
Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			633814	12/15/21 10:06	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	634096	12/16/21 12:51	FXG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

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

Job ID: 500-209156-1

Client Sample ID: MW-04

Date Collected: 11/30/21 10:47

Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			632458	12/07/21 10:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	632735	12/08/21 10:05	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	632355	12/07/21 05:12	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		3	632730	12/07/21 15:41	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	634708	12/20/21 17:06	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		3	632731	12/07/21 17:23	RES	TAL CHI

Client Sample ID: MW-05

Date Collected: 11/30/21 11:40

Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			633814	12/15/21 10:06	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	634096	12/16/21 12:54	FXG	TAL CHI
Total/NA	Prep	7470A			632458	12/07/21 10:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	632735	12/08/21 10:07	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	632355	12/07/21 05:14	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		3	632730	12/07/21 15:42	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	634708	12/20/21 17:10	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		3	632731	12/07/21 17:23	RES	TAL CHI

Client Sample ID: MW-10

Date Collected: 11/30/21 10:12

Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			633814	12/15/21 10:06	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	634096	12/16/21 12:58	FXG	TAL CHI
Total/NA	Prep	7470A			632458	12/07/21 10:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	632735	12/08/21 10:09	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	632355	12/07/21 05:17	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		3	632730	12/07/21 15:42	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	634708	12/20/21 17:13	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		1	632731	12/07/21 17:23	RES	TAL CHI

Client Sample ID: Duplicate

Date Collected: 11/30/21 00:00

Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			633814	12/15/21 10:06	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	634096	12/16/21 13:01	FXG	TAL CHI
Total/NA	Prep	7470A			632458	12/07/21 10:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	632735	12/08/21 10:11	MJG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

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

Job ID: 500-209156-1

Client Sample ID: Duplicate

Lab Sample ID: 500-209156-7

Date Collected: 11/30/21 00:00

Matrix: Water

Date Received: 12/02/21 10:25

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Analysis	SM 2540C		1	632165	12/06/21 03:12	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		3	632730	12/07/21 15:43	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	634708	12/20/21 17:17	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		1	632731	12/07/21 17:23	RES	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, 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: 500-209156-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-29-22

1

2

3

4

5

6

7

8

9

10

11

12

13

ANALYTICAL REPORT

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

Laboratory Job ID: 500-209156-2
Client Project/Site: Powerton CCR FAB

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

Attn: Richard Gnat



Authorized for release by:
1/13/2022 1:19:03 PM
Robin Kintz, Project Manager II
(708)534-5200
Robin.Kintz@Eurofinset.com

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

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Method Summary	4
Sample Summary	5
Client Sample Results	6
Definitions	13
QC Association	14
QC Sample Results	15
Chain of Custody	16
Receipt Checklists	19
Chronicle	21
Certification Summary	23
Tracer Carrier Summary	24

Case Narrative

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

Job ID: 500-209156-2

Job ID: 500-209156-2

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-209156-2

Comments

No additional comments.

Receipt

The samples were received on 12/2/2021 10:25 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.7° C and 5.8° C.

RAD

Method 903.0: Radium 226 batch 542574

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 (500-209156-1), MW-02 (500-209156-2), MW-03 (500-209156-3), MW-04 (500-209156-4), MW-05 (500-209156-5), MW-10 (500-209156-6), Duplicate (500-209156-7), (LCS 160-542574/1-A), (MB 160-542574/17-A), (500-209153-C-6-A) and (500-209153-D-6-A DU)

Method 904.0: Radium 228 batch 542579

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 (500-209156-1), MW-02 (500-209156-2), MW-03 (500-209156-3), MW-04 (500-209156-4), MW-05 (500-209156-5), MW-10 (500-209156-6), Duplicate (500-209156-7), (LCS 160-542579/1-A), (MB 160-542579/17-A), (500-209153-C-6-B) and (500-209153-D-6-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

Job ID: 500-209156-2

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

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

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

Sample Summary

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

Job ID: 500-209156-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-209156-1	MW-01	Water	11/30/21 11:15	12/02/21 10:25
500-209156-2	MW-02	Water	11/30/21 08:48	12/02/21 10:25
500-209156-3	MW-03	Water	11/30/21 09:51	12/02/21 10:25
500-209156-4	MW-04	Water	11/30/21 10:47	12/02/21 10:25
500-209156-5	MW-05	Water	11/30/21 11:40	12/02/21 10:25
500-209156-6	MW-10	Water	11/30/21 10:12	12/02/21 10:25
500-209156-7	Duplicate	Water	11/30/21 00:00	12/02/21 10:25

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

Client Sample Results

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

Job ID: 500-209156-2

Client Sample ID: MW-01
Date Collected: 11/30/21 11:15
Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-1
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0539	U	0.0603	0.0605	1.00	0.0969	pCi/L	12/17/21 13:15	01/10/22 20:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.1		40 - 110					12/17/21 13:15	01/10/22 20:29	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.310	U	0.272	0.274	1.00	0.434	pCi/L	12/17/21 13:42	12/22/21 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.1		40 - 110					12/17/21 13:42	12/22/21 13:21	1
Y Carrier	83.0		40 - 110					12/17/21 13:42	12/22/21 13:21	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.364	U	0.279	0.281	5.00	0.434	pCi/L		01/12/22 18:50	1

Client Sample Results

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

Job ID: 500-209156-2

Client Sample ID: MW-02
Date Collected: 11/30/21 08:48
Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-2
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0543	U	0.0536	0.0538	1.00	0.0823	pCi/L	12/17/21 13:15	01/10/22 20:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		40 - 110					12/17/21 13:15	01/10/22 20:29	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.521		0.299	0.303	1.00	0.453	pCi/L	12/17/21 13:42	12/22/21 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		40 - 110					12/17/21 13:42	12/22/21 13:21	1
Y Carrier	81.9		40 - 110					12/17/21 13:42	12/22/21 13:21	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.575		0.304	0.308	5.00	0.453	pCi/L		01/12/22 18:50	1

Client Sample Results

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

Job ID: 500-209156-2

Client Sample ID: MW-03
Date Collected: 11/30/21 09:51
Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-3
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00532	U	0.0481	0.0481	1.00	0.0967	pCi/L	12/17/21 13:15	01/10/22 20:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		40 - 110					12/17/21 13:15	01/10/22 20:29	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0758	U	0.235	0.235	1.00	0.436	pCi/L	12/17/21 13:42	12/22/21 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		40 - 110					12/17/21 13:42	12/22/21 13:21	1
Y Carrier	84.5		40 - 110					12/17/21 13:42	12/22/21 13:21	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0705	U	0.240	0.240	5.00	0.436	pCi/L		01/12/22 18:50	1

Client Sample Results

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

Job ID: 500-209156-2

Client Sample ID: MW-04
Date Collected: 11/30/21 10:47
Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-4
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0191	U	0.0530	0.0531	1.00	0.0992	pCi/L	12/17/21 13:15	01/10/22 20:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.6		40 - 110					12/17/21 13:15	01/10/22 20:29	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0863	U	0.241	0.241	1.00	0.419	pCi/L	12/17/21 13:42	12/22/21 13:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.6		40 - 110					12/17/21 13:42	12/22/21 13:22	1
Y Carrier	84.5		40 - 110					12/17/21 13:42	12/22/21 13:22	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.105	U	0.247	0.247	5.00	0.419	pCi/L		01/12/22 18:50	1

Client Sample Results

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

Job ID: 500-209156-2

Client Sample ID: MW-05
Date Collected: 11/30/21 11:40
Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-5
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0769	U	0.0640	0.0644	1.00	0.0949	pCi/L	12/17/21 13:15	01/10/22 20:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.3		40 - 110					12/17/21 13:15	01/10/22 20:30	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.555		0.279	0.283	1.00	0.409	pCi/L	12/17/21 13:42	12/22/21 13:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.3		40 - 110					12/17/21 13:42	12/22/21 13:22	1
Y Carrier	84.9		40 - 110					12/17/21 13:42	12/22/21 13:22	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.632		0.286	0.290	5.00	0.409	pCi/L		01/12/22 18:50	1

Client Sample Results

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

Job ID: 500-209156-2

Client Sample ID: MW-10
Date Collected: 11/30/21 10:12
Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-6
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.375		0.136	0.140	1.00	0.150	pCi/L	12/17/21 13:15	01/10/22 22:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		40 - 110					12/17/21 13:15	01/10/22 22:15	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.01		0.417	0.428	1.00	0.596	pCi/L	12/17/21 13:42	12/22/21 13:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		40 - 110					12/17/21 13:42	12/22/21 13:23	1
Y Carrier	86.0		40 - 110					12/17/21 13:42	12/22/21 13:23	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.39		0.439	0.450	5.00	0.596	pCi/L		01/12/22 18:50	1

Client Sample Results

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

Job ID: 500-209156-2

Client Sample ID: Duplicate

Lab Sample ID: 500-209156-7

Date Collected: 11/30/21 00:00

Matrix: Water

Date Received: 12/02/21 10:25

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.423		0.134	0.140	1.00	0.122	pCi/L	12/17/21 13:15	01/10/22 22:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.6		40 - 110					12/17/21 13:15	01/10/22 22:15	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.486	U	0.330	0.333	1.00	0.506	pCi/L	12/17/21 13:42	12/22/21 13:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.6		40 - 110					12/17/21 13:42	12/22/21 13:23	1
Y Carrier	83.0		40 - 110					12/17/21 13:42	12/22/21 13:23	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.910		0.356	0.361	5.00	0.506	pCi/L		01/12/22 18:50	1

Definitions/Glossary

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

Job ID: 500-209156-2

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

Job ID: 500-209156-2

Rad

Prep Batch: 542574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209156-1	MW-01	Total/NA	Water	PrecSep-21	
500-209156-2	MW-02	Total/NA	Water	PrecSep-21	
500-209156-3	MW-03	Total/NA	Water	PrecSep-21	
500-209156-4	MW-04	Total/NA	Water	PrecSep-21	
500-209156-5	MW-05	Total/NA	Water	PrecSep-21	
500-209156-6	MW-10	Total/NA	Water	PrecSep-21	
500-209156-7	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-542574/17-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-542574/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 542579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-209156-1	MW-01	Total/NA	Water	PrecSep_0	
500-209156-2	MW-02	Total/NA	Water	PrecSep_0	
500-209156-3	MW-03	Total/NA	Water	PrecSep_0	
500-209156-4	MW-04	Total/NA	Water	PrecSep_0	
500-209156-5	MW-05	Total/NA	Water	PrecSep_0	
500-209156-6	MW-10	Total/NA	Water	PrecSep_0	
500-209156-7	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-542579/17-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-542579/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

QC Sample Results

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

Job ID: 500-209156-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-542574/17-A
Matrix: Water
Analysis Batch: 545650

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 542574

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.01387	U	0.0486	0.0487	1.00	0.0922	pCi/L	12/17/21 13:15	01/10/22 22:15	1
Carrier	MB	MB	Limits			Prepared	Analyzed	Dil Fac		
	%Yield	Qualifier								
Ba Carrier	96.8		40 - 110			12/17/21 13:15	01/10/22 22:15	1		

Lab Sample ID: LCS 160-542574/1-A
Matrix: Water
Analysis Batch: 545650

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 542574

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	10.56		1.09	1.00	0.117	pCi/L	93	75 - 125
Carrier	LCS	LCS	Limits			Prepared	Analyzed	Dil Fac	
	%Yield	Qualifier							
Ba Carrier	87.6		40 - 110						

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-542579/17-A
Matrix: Water
Analysis Batch: 543295

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 542579

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.1995	U	0.229	0.230	1.00	0.377	pCi/L	12/17/21 13:42	12/22/21 13:23	1
Carrier	MB	MB	Limits			Prepared	Analyzed	Dil Fac		
	%Yield	Qualifier								
Ba Carrier	96.8		40 - 110			12/17/21 13:42	12/22/21 13:23	1		
Y Carrier	85.2		40 - 110			12/17/21 13:42	12/22/21 13:23	1		

Lab Sample ID: LCS 160-542579/1-A
Matrix: Water
Analysis Batch: 543309

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 542579

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-228	9.03	9.733		1.15	1.00	0.383	pCi/L	108	75 - 125
Carrier	LCS	LCS	Limits			Prepared	Analyzed	Dil Fac	
	%Yield	Qualifier							
Ba Carrier	87.6		40 - 110						
Y Carrier	83.0		40 - 110						

ORIGIN ID:PIAA (000) 000-0000
KPRG AND ASSOCIATES
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 30NOV21
ACTWTG: 42.50 LB
CAD: 6994779/SSFE2220
DIMS: 24x18x12 IN
BILL THIRD PARTY

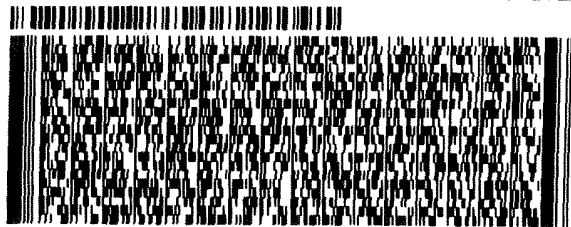
Part # 156297-435 FRDW2 EXP 04/22

TO **SAMPLE RECEIVING**
EUROFINS
2417 BOND ST

5.8

UNIVERSITY PARK IL 60484

(000) 000-0000 REF:
INU: PO: DEPT:



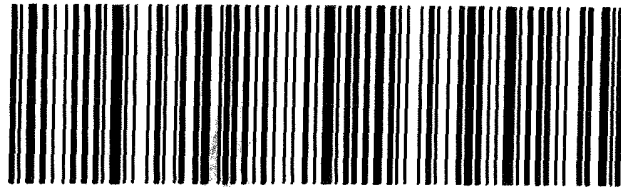
2 of 4
MPS# 2868 3527 8401
0263
Metr# 2868 3527 8397

THU - 02 DEC 4:30P
** 2DAY **

0201

TT JOTA

60484
IL-US ORD



ORIGIN ID:PIAA (000) 000-0000
KPRG AND ASSOCIATES
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 30NOV21
ACTWTG: 42.50 LB
CAD: 6994779/SSFE2220
DIMS: 24x18x12 IN
BILL THIRD PARTY

Part # 156297-435 FRDW2 EXP 04/22

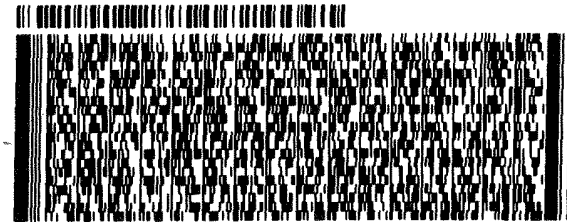
TO **SAMPLE RECEIVING**
EUROFINS
2417 BOND ST



UNIVERSITY PARK IL 60484

500-209156 Wayb

(000) 000-0000 REF:
INU: PO: DEPT:



4 of 4
MPS# 2868 3527 8423
0263
Metr# 2868 3527 8397

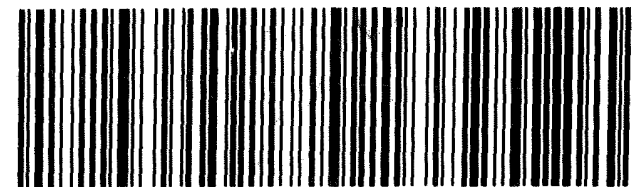
THU - 02 DEC 4:30P
** 2DAY **

0201

TT JOTA

1.7

60484
IL-US ORD



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-209156-2

Login Number: 209156

List Number: 1

Creator: Hernandez, Stephanie

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.8,1.7
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: 500-209156-2

Login Number: 209156

List Number: 2

Creator: Johnson, Autumn R

List Source: Eurofins St. Louis

List Creation: 12/03/21 02:10 PM

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



Lab Chronicle

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

Job ID: 500-209156-2

Client Sample ID: MW-01

Lab Sample ID: 500-209156-1

Date Collected: 11/30/21 11:15

Matrix: Water

Date Received: 12/02/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			542574	12/17/21 13:15	LPS	TAL SL
Total/NA	Analysis	903.0		1	545650	01/10/22 20:29	FLC	TAL SL
Total/NA	Prep	PrecSep_0			542579	12/17/21 13:42	LPS	TAL SL
Total/NA	Analysis	904.0		1	543295	12/22/21 13:21	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	546048	01/12/22 18:50	EMH	TAL SL

Client Sample ID: MW-02

Lab Sample ID: 500-209156-2

Date Collected: 11/30/21 08:48

Matrix: Water

Date Received: 12/02/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			542574	12/17/21 13:15	LPS	TAL SL
Total/NA	Analysis	903.0		1	545650	01/10/22 20:29	FLC	TAL SL
Total/NA	Prep	PrecSep_0			542579	12/17/21 13:42	LPS	TAL SL
Total/NA	Analysis	904.0		1	543295	12/22/21 13:21	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	546048	01/12/22 18:50	EMH	TAL SL

Client Sample ID: MW-03

Lab Sample ID: 500-209156-3

Date Collected: 11/30/21 09:51

Matrix: Water

Date Received: 12/02/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			542574	12/17/21 13:15	LPS	TAL SL
Total/NA	Analysis	903.0		1	545650	01/10/22 20:29	FLC	TAL SL
Total/NA	Prep	PrecSep_0			542579	12/17/21 13:42	LPS	TAL SL
Total/NA	Analysis	904.0		1	543295	12/22/21 13:21	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	546048	01/12/22 18:50	EMH	TAL SL

Client Sample ID: MW-04

Lab Sample ID: 500-209156-4

Date Collected: 11/30/21 10:47

Matrix: Water

Date Received: 12/02/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			542574	12/17/21 13:15	LPS	TAL SL
Total/NA	Analysis	903.0		1	545650	01/10/22 20:29	FLC	TAL SL
Total/NA	Prep	PrecSep_0			542579	12/17/21 13:42	LPS	TAL SL
Total/NA	Analysis	904.0		1	543295	12/22/21 13:22	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	546048	01/12/22 18:50	EMH	TAL SL

Lab Chronicle

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

Job ID: 500-209156-2

Client Sample ID: MW-05

Date Collected: 11/30/21 11:40

Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			542574	12/17/21 13:15	LPS	TAL SL
Total/NA	Analysis	903.0		1	545650	01/10/22 20:30	FLC	TAL SL
Total/NA	Prep	PrecSep_0			542579	12/17/21 13:42	LPS	TAL SL
Total/NA	Analysis	904.0		1	543295	12/22/21 13:22	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	546048	01/12/22 18:50	EMH	TAL SL

Client Sample ID: MW-10

Date Collected: 11/30/21 10:12

Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			542574	12/17/21 13:15	LPS	TAL SL
Total/NA	Analysis	903.0		1	545650	01/10/22 22:15	FLC	TAL SL
Total/NA	Prep	PrecSep_0			542579	12/17/21 13:42	LPS	TAL SL
Total/NA	Analysis	904.0		1	543295	12/22/21 13:23	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	546048	01/12/22 18:50	EMH	TAL SL

Client Sample ID: Duplicate

Date Collected: 11/30/21 00:00

Date Received: 12/02/21 10:25

Lab Sample ID: 500-209156-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			542574	12/17/21 13:15	LPS	TAL SL
Total/NA	Analysis	903.0		1	545650	01/10/22 22:15	FLC	TAL SL
Total/NA	Prep	PrecSep_0			542579	12/17/21 13:42	LPS	TAL SL
Total/NA	Analysis	904.0		1	543295	12/22/21 13:23	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	546048	01/12/22 18:50	EMH	TAL SL

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 500-209156-2

Laboratory: Eurofins St. Louis

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

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

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

Tracer/Carrier Summary

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

Job ID: 500-209156-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (40-110)	
500-209156-1	MW-01	82.1	
500-209156-2	MW-02	91.0	
500-209156-3	MW-03	88.1	
500-209156-4	MW-04	85.6	
500-209156-5	MW-05	91.3	
500-209156-6	MW-10	91.8	
500-209156-7	Duplicate	89.6	
LCS 160-542574/1-A	Lab Control Sample	87.6	
MB 160-542574/17-A	Method Blank	96.8	
Tracer/Carrier Legend			
Ba = Ba Carrier			

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (40-110)	Y (40-110)
500-209156-1	MW-01	82.1	83.0
500-209156-2	MW-02	91.0	81.9
500-209156-3	MW-03	88.1	84.5
500-209156-4	MW-04	85.6	84.5
500-209156-5	MW-05	91.3	84.9
500-209156-6	MW-10	91.8	86.0
500-209156-7	Duplicate	89.6	83.0
LCS 160-542579/1-A	Lab Control Sample	87.6	83.0
MB 160-542579/17-A	Method Blank	96.8	85.2
Tracer/Carrier Legend			
Ba = Ba Carrier			
Y = Y Carrier			