

DATA SUMMARY POSTING

Station: Midwest Generation Powerton Generating Station

Regulated Unit(s): Metal Cleaning Basin (IEPA ID No. W1798010008-03)

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 1st 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. 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. MW-20 was unable to be sampled as it was determined there was an insufficient water column within the well to allow for sample collection.

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 for the Metal Cleaning Basin dated March 31, 2022. 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 - Metals Cleaning 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	Selenium	Thallium		
MW-13 (S) up-gradient	4/8/2021	2.6	380	130	0.4	8.08	1500	2700	< 0.003	0.021	0.21	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.025	0.77	< 0.0025	< 0.002		
	5/13/2021	2.6	340	130	0.39	7.86	1400	2500	< 0.003	0.023	0.23	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.022	0.84	< 0.0025	< 0.002		
	6/3/2021	3.2	370	150	0.41	7.63	1500	2600	< 0.003	0.025	0.22	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.026	0.79	< 0.0025	< 0.002		
	8/23/2021	3	340	110	0.36	7.72	980	2000	< 0.003	0.021	0.19	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.022	0.9	< 0.0025	< 0.002		
	10/1/2021	2.8	320	120	0.36	7.78	1300	2500	< 0.003	0.025	0.25	< 0.001	< 0.0005	< 0.005	< 0.001	0.00065	< 0.01	< 0.0002	0.023	< 0.577	< 0.0025	< 0.002		
	11/30/2021	3.1	330	120	0.36	7.79	1000	2100	< 0.003	0.024	0.19	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.021	0.635	< 0.0025	< 0.002		
	1/6/2022	3.1	280	120	0.4	7.77	950	2000	< 0.003	0.028	0.25	< 0.001	< 0.0005	< 0.005	< 0.001	0.00055	< 0.002	< 0.0002	0.022	1.57	< 0.0025	< 0.002		
	2/9/2022	2.8	310	120	0.41	7.67	1000	2200	< 0.003	0.026	0.25	< 0.001	< 0.0005	< 0.005	< 0.001	0.00061	< 0.002	< 0.0002	0.02	1.34	< 0.0025	< 0.002		
	6/8/2022	3.2	240	100	0.37	7.96	860	1800	< 0.003	0.021	0.17	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.002	< 0.0002	0.021	< 0.502	< 0.0025	< 0.002		
	8/31/2022	2.9	B	250	110	0.39	7.64	FI	790	1900	< 0.003	0.022	0.19	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.019	0.819	< 0.0025	< 0.002
	11/16/2022	2.6	250	120	0.83	7.97	910	1800	< 0.003	0.029	0.21	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	< 0.01	< 0.0002	0.018	3.04	< 0.0025	< 0.002		
	2/23/2023	3.1	220	130	0.42	8.38	660	1700	< 0.0030	0.028	0.22	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	< 0.010	0.00033	0.020	1.15	< 0.0025	< 0.0020		
	11/18/2015	1.5	270	H	0.53	0.96	H	H	1400	< 0.0061	0.03	0.096	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.042	H	< 0.0002	0.023	< 0.599	0.0065	< 0.002
	2/25/2016	2.0	240	110	0.61	6.84	640	1700	< 0.003	0.025	0.083	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.041	< 0.0002	0.035	0.870	0.045	< 0.002	< 0.002	
	5/19/2016	2.7	320	240	0.53	6.83	1200	2800	< 0.003	0.04	0.097	< 0.001	< 0.00098	< 0.005	< 0.001	< 0.0005	0.044	< 0.0002	0.041	< 0.420	0.0067	< 0.002	< 0.002	
8/18/2016	1.5	200	FI	170	0.54	6.96	660	1900	< 0.003	0.13	0.11	< 0.001	0.0041	< 0.005	< 0.001	< 0.0005	0.028	< 0.0002	0.027	< 0.672	0.0061	< 0.002	< 0.002	
11/17/2016	1.3	120	180	0.47	6.91	560	1900	< 0.003	0.0033	0.031	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.016	< 0.0002	0.018	< 0.570	0.0078	< 0.002	< 0.002		
2/17/2017	1.9	200	190	0.43	7.24	670	1700	< 0.003	0.02	0.056	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.025	< 0.0002	0.027	< 0.392	0.0032	< 0.002	< 0.002		
5/4/2017	1.5	180	190	0.57	7.35	670	1700	< 0.003	0.011	0.049	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.023	< 0.0002	0.023	< 0.456	0.0034	< 0.002	< 0.002		
6/21/2017	1.6	180	200	0.56	7.30	530	1600	< 0.003	0.0093	0.054	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.027	< 0.0002	0.03	< 0.347	0.019	< 0.002	< 0.002		
8/29/2017	2.2	190	200	0.53	6.87	540	1800	< 0.003	0.018	0.044	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.023	< 0.0002	0.022	0.377	0.092	< 0.002	< 0.002		
11/10/2017	1.6	170	180	0.63	7.09	530	1500	< 0.003	0.0063	0.045	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.025	< 0.0002	0.02	< 0.313	0.016	< 0.002	< 0.002		
5/17/2018	2.3	200	160	0.5	6.75	880	1800	< 0.003	0.0081	0.05	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.029	< 0.0002	0.03	0.397	0.077	< 0.002	< 0.002		
8/9/2018	2.3	200	200	0.48	7.06	520	1700	< 0.003	0.0083	0.048	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.026	< 0.0002	0.033	0.566	0.06	< 0.002	< 0.002		
5/2/2019	1.5	180	200	0.52	6.89	420	1500	< 0.003	0.0045	0.052	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.027	< 0.0002	0.023	< 0.424	< 0.0025	< 0.002	< 0.002		
11/14/2019	1.8	170	170	0.5	7.24	260	1300	< 0.003	0.0044	0.053	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.029	< 0.0002	0.025	< 0.475	< 0.0025	< 0.002	< 0.002		
4/29/2020	1.2	160	200	0.58	6.90	370	1300	NA	0.0036	0.06	NA	< 0.0005	NA	< 0.0010	< 0.0005	0.027	< 0.0002	0.023	0.578	< 0.0025	< 0.002	< 0.002		
12/8/2020	1.5	170	200	0.55	7.04	540	1400	NA	0.02	0.10	NA	0.00059	NA	0.0012	< 0.0005	0.035	< 0.0002	0.02	0.626	0.012	< 0.002	< 0.002		
5/12/2021	1.3	180	180	0.54	6.97	520	1500	< 0.003	0.0048	0.065	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.026	< 0.0002	0.014	< 0.648	0.0071	< 0.002	< 0.002		
7/20/2021	1.5	190	180	0.49	6.80	440	1500	< 0.003	0.0027	0.057	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.028	< 0.0002	0.02	< 0.398	< 0.0025	< 0.002	< 0.002		
8/23/2021	1.6	200	180	0.52	6.76	440	1500	< 0.003	0.0019	0.052	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.026	< 0.0002	0.024	< 0.794	0.012	< 0.002	< 0.002		
10/1/2021	1.2	180	180	0.53	6.97	430	1400	< 0.003	0.0087	0.065	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.028	< 0.0002	0.018	< 0.511	0.009	< 0.002	< 0.002		
11/29/2021	1.9	230	240	0.5	6.71	450	1700	< 0.003	0.0031	0.074	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.024	< 0.0002	0.016	< 0.353	0.055	< 0.002	< 0.002		
2/9/2022	0.84	140	160	0.58	6.91	320	1200	< 0.003	0.0075	0.054	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.023	< 0.0002	0.014	< 0.51	0.025	< 0.002	< 0.002		
6/8/2022	2	310	230	0.43	6.87	970	2600	< 0.003	0.004	0.09	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.027	< 0.0002	0.019	< 0.612	0.12	< 0.002	< 0.002		
8/31/2022	1.5	B	210	0.5	6.80	550	1900	< 0.003	0.0054	0.057	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.03	< 0.0002	0.022	0.548	0.008	< 0.002	< 0.002		
11/16/2022	1.3	210	220	0.81	7.26	400	1500	< 0.003	0.012	0.068	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.026	< 0.0002	0.05	0.851	< 0.0025	< 0.002	< 0.002		
2/23/2023	1.3	190	210	0.37	7.52	370	1400	< 0.0030	0.0049	0.055	< 0.001	< 0.0005	< 0.0050	< 0.0010	0.089	< 0.0005	0.024	< 0.0002	0.096	0.725	< 0.0025	< 0.0029		
MW-15 (CL) down-gradient	11/19/2015	1.6	210	H	0.43	7.11	H	850	H	1800	< 0.003	0.028	0.14	< 0.001	< 0.0005	< 0.005	0.012	< 0.0002	0.035	< 0.790	< 0.0025	< 0.002		
	2/22/2016	1.8	290	280	0.55	7.19	960	2100	< 0.003	0.021	0.051	< 0.001	< 0.0005	< 0.005	0.012	< 0.0005	0.038	< 0.0002	0.093	1.07	< 0.0025	< 0.002		
	5/18/2016	1.4	200	230	0.64	7.02	700	1800	< 0.003	0.32	0.12	< 0.001	0.0011	< 0.0005	0.015	< 0.0005	0.026	< 0.0002	0.12	8.27	< 0.0025	0.028		
	8/15/2016	1.1	220	220	0.60	7.08	860	2100	< 0.003	0.34	0.12	< 0.001	0.001	< 0.0005	0.016	< 0.0005	0.022	< 0.0002	0.1	0.606	< 0.0025	0.0031		
	11/14/2016	1.5	200	210	0.56	7.26	560	2000	< 0.003	0.19	0.073	< 0.001	0.00051	< 0.005	0.012	< 0.0005	0.022	< 0.0002	0.042	3.76	< 0.0025	0.0021		

Table 2. Groundwater Turbidity - Midwest Generation, LLC, Powerton Station, Pekin, IL, Metal Cleaning Basin.

Well	Date	Turbidity (NTU)
MW-13	2/24/2021	8.90
	4/8/2021	6.50
	5/13/2021	2.17
	6/3/2021	2.81
	6/29/2021	4.00
	8/23/2021	3.99
	10/1/2021	4.82
	11/30/2021	5.51
	1/6/2022	16.87
	2/9/2022	1.99
	6/8/2022	30.66
	8/31/2022	16.22
	11/16/2022	4.82
2/23/2023	23.89	
MW-15	2/24/2021	64.90
	4/9/2021	16.80
	5/12/2021	16.45
	6/3/2021	7.85
	6/29/2021	6.58
	7/20/2021	5.82
	8/23/2021	4.28
	10/1/2021	13.13
	11/29/2021	12.35
	2/7/2022	9.38
	6/8/2022	10.32
	8/31/2022	28.7
	11/16/2022	55.82
2/23/2023	21.36	
MW-17	2/24/2021	42.00
	4/8/2021	17.10
	5/12/2021	10.90
	6/3/2021	38.15
	6/28/2021	29.15
	7/20/2021	16.38
	8/23/2021	26.51
	10/1/2021	21.26
	11/30/2021	8.86
	2/9/2022	11.19
	6/8/2022	41.49
	8/31/2022	22.58
	11/16/2022	116.69
2/23/2023	20.65	
MW-14	2/24/2021	13.90
	4/8/2021	5.39
	5/12/2021	1.22
	6/3/2021	2.63
	6/28/2021	3.74
	7/20/2021	4.34
	8/23/2021	4.26
	10/1/2021	10.27
	11/29/2021	12.29
	2/9/2022	8.66
	6/8/2022	19.54
	8/31/2022	40.75
	11/17/2022	31.69
2/21/2023	7.33	
MW-20	3/12/2021	343.30
	4/8/2021	14.45
	5/12/2021	3.89
	6/3/2021	6.01
	6/28/2021	8.28
	7/20/2021	9.16
	8/23/2021	27.31
	10/1/2021	8.27
	11/29/2021	8.35
	2/8/2022	76.4
	6/9/2022	19.31
	9/1/2022	63.5
	11/17/2022	NM
2/21/2023	NM	
MW-21	3/12/2021	49.20
	4/8/2021	5.88
	5/12/2021	26.09
	6/3/2021	17.61
	6/28/2021	6.33
	7/20/2021	44.93
	8/23/2021	19.43
	10/8/2021	94.82
	11/29/2021	20.2
	3/1/2022	7.64
	6/9/2022	7.56
	9/1/2022	NM
	11/17/2022	NM
2/20/2023	25.99	

NM - Not Measured due to insufficient water volume.

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

Attn: Richard Gnat
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Brookfield, Wisconsin 53005

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JOB DESCRIPTION

Powerton CCR MCB

JOB NUMBER

500-229904-1

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.

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Authorization



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Case Narrative

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

Job ID: 500-229904-1

Job ID: 500-229904-1

Laboratory: Eurofins Chicago

Narrative

**Job Narrative
500-229904-1**

Receipt

The samples were received on 2/24/2023 9:50 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 -1.6° C, -1.0° C and 1.6° C.

Metals

Method 6020A: The low level continuing calibration verification (ICVL/CCVL) associated with batch 500-700664 recovered above the upper control limit for Beryllium. The samples associated with this ICVL/CCVL were non-detects for the affected analyte; therefore, the data have been reported.

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

General Chemistry

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



Method Summary

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

Job ID: 500-229904-1

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 MCB

Job ID: 500-229904-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-229904-1	MW-15	Water	02/23/23 08:43	02/24/23 09:50
500-229904-2	MW-17	Water	02/23/23 09:39	02/24/23 09:50
500-229904-3	Duplicate	Water	02/23/23 00:00	02/24/23 09:50
500-229904-4	MW-13	Water	02/23/23 10:44	02/24/23 09:50
500-229904-5	MW-14	Water	02/22/23 15:23	02/25/23 09:30
500-229904-6	MW-21	Water	02/22/23 08:25	02/25/23 09:30

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Client Sample Results

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

Job ID: 500-229904-1

Client Sample ID: MW-15

Lab Sample ID: 500-229904-1

Date Collected: 02/23/23 08:43

Matrix: Water

Date Received: 02/24/23 09:50

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		02/27/23 08:21	02/28/23 18:35	1
Arsenic	0.0049		0.0010		mg/L		02/27/23 08:21	02/28/23 18:35	1
Barium	0.055		0.0025		mg/L		02/27/23 08:21	02/28/23 18:35	1
Beryllium	<0.0010	^1+ ^+	0.0010		mg/L		02/27/23 08:21	02/28/23 18:35	1
Boron	1.3		0.25		mg/L		02/27/23 08:21	03/01/23 14:08	5
Cadmium	0.00087		0.00050		mg/L		02/27/23 08:21	02/28/23 18:35	1
Calcium	190		0.20		mg/L		02/27/23 08:21	02/28/23 18:35	1
Chromium	<0.0050		0.0050		mg/L		02/27/23 08:21	02/28/23 18:35	1
Cobalt	0.0089		0.0010		mg/L		02/27/23 08:21	02/28/23 18:35	1
Lead	<0.00050		0.00050		mg/L		02/27/23 08:21	02/28/23 18:35	1
Lithium	0.024		0.010		mg/L		02/27/23 08:21	02/28/23 18:35	1
Molybdenum	0.096		0.0050		mg/L		02/27/23 08:21	02/28/23 18:35	1
Selenium	0.028		0.0025		mg/L		02/27/23 08:21	02/28/23 18:35	1
Thallium	0.0029		0.0020		mg/L		02/27/23 08:21	02/28/23 18:35	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/03/23 14:45	03/06/23 10:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1400		10		mg/L			03/02/23 03:17	1
Chloride (SM 4500 Cl- E)	210		40		mg/L			03/06/23 12:33	20
Fluoride (SM 4500 F C)	0.37		0.10		mg/L			03/02/23 13:02	1
Sulfate (SM 4500 SO4 E)	370		250		mg/L			03/02/23 13:00	50

Client Sample ID: MW-17

Lab Sample ID: 500-229904-2

Date Collected: 02/23/23 09:39

Matrix: Water

Date Received: 02/24/23 09:50

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		02/27/23 08:21	02/28/23 18:38	1
Arsenic	0.0041		0.0010		mg/L		02/27/23 08:21	02/28/23 18:38	1
Barium	0.028		0.0025		mg/L		02/27/23 08:21	02/28/23 18:38	1
Beryllium	<0.0010	^1+ ^+	0.0010		mg/L		02/27/23 08:21	02/28/23 18:38	1
Boron	1.5		0.25		mg/L		02/27/23 08:21	03/01/23 14:11	5
Cadmium	<0.00050		0.00050		mg/L		02/27/23 08:21	02/28/23 18:38	1
Calcium	170		0.20		mg/L		02/27/23 08:21	02/28/23 18:38	1
Chromium	<0.0050		0.0050		mg/L		02/27/23 08:21	02/28/23 18:38	1
Cobalt	<0.0010		0.0010		mg/L		02/27/23 08:21	02/28/23 18:38	1
Lead	<0.00050		0.00050		mg/L		02/27/23 08:21	02/28/23 18:38	1
Lithium	0.015		0.010		mg/L		02/27/23 08:21	02/28/23 18:38	1
Molybdenum	0.044		0.0050		mg/L		02/27/23 08:21	02/28/23 18:38	1
Selenium	<0.0025		0.0025		mg/L		02/27/23 08:21	02/28/23 18:38	1
Thallium	0.0021		0.0020		mg/L		02/27/23 08:21	02/28/23 18:38	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/03/23 14:45	03/06/23 10:41	1

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Client Sample Results

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

Job ID: 500-229904-1

Client Sample ID: MW-17

Date Collected: 02/23/23 09:39

Date Received: 02/24/23 09:50

Lab Sample ID: 500-229904-2

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1700		10		mg/L			03/02/23 03:20	1
Chloride (SM 4500 Cl- E)	210		20		mg/L			03/06/23 12:33	10
Fluoride (SM 4500 F C)	0.65		0.10		mg/L			03/02/23 13:02	1
Sulfate (SM 4500 SO4 E)	710		250		mg/L			03/02/23 13:00	50

Client Sample ID: Duplicate

Date Collected: 02/23/23 00:00

Date Received: 02/24/23 09:50

Lab Sample ID: 500-229904-3

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		02/27/23 08:21	02/28/23 18:42	1
Arsenic	0.024		0.0010		mg/L		02/27/23 08:21	02/28/23 18:42	1
Barium	0.18		0.0025		mg/L		02/27/23 08:21	02/28/23 18:42	1
Beryllium	<0.0010	^1+ ^+	0.0010		mg/L		02/27/23 08:21	02/28/23 18:42	1
Boron	3.0		0.50		mg/L		02/27/23 08:21	03/01/23 14:15	10
Cadmium	<0.00050		0.00050		mg/L		02/27/23 08:21	02/28/23 18:42	1
Calcium	210		0.20		mg/L		02/27/23 08:21	02/28/23 18:42	1
Chromium	<0.0050		0.0050		mg/L		02/27/23 08:21	02/28/23 18:42	1
Cobalt	<0.0010		0.0010		mg/L		02/27/23 08:21	02/28/23 18:42	1
Lead	<0.00050		0.00050		mg/L		02/27/23 08:21	02/28/23 18:42	1
Lithium	<0.010		0.010		mg/L		02/27/23 08:21	02/28/23 18:42	1
Molybdenum	0.021		0.0050		mg/L		02/27/23 08:21	02/28/23 18:42	1
Selenium	<0.0025		0.0025		mg/L		02/27/23 08:21	02/28/23 18:42	1
Thallium	<0.0020		0.0020		mg/L		02/27/23 08:21	02/28/23 18:42	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0021		0.00020		mg/L		03/03/23 14:45	03/06/23 11:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1700		10		mg/L			03/02/23 03:22	1
Chloride (SM 4500 Cl- E)	130		20		mg/L			03/06/23 12:33	10
Fluoride (SM 4500 F C)	0.41		0.10		mg/L			03/02/23 13:02	1
Sulfate (SM 4500 SO4 E)	740		500		mg/L			03/02/23 13:01	100

Client Sample ID: MW-13

Date Collected: 02/23/23 10:44

Date Received: 02/24/23 09:50

Lab Sample ID: 500-229904-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/27/23 08:21	02/28/23 18:45	1
Arsenic	0.028		0.0010		mg/L		02/27/23 08:21	02/28/23 18:45	1
Barium	0.22		0.0025		mg/L		02/27/23 08:21	02/28/23 18:45	1
Beryllium	<0.0010	^1+ ^+	0.0010		mg/L		02/27/23 08:21	02/28/23 18:45	1
Boron	3.1		0.50		mg/L		02/27/23 08:21	03/01/23 14:18	10
Cadmium	<0.00050		0.00050		mg/L		02/27/23 08:21	02/28/23 18:45	1
Calcium	220		0.20		mg/L		02/27/23 08:21	02/28/23 18:45	1
Chromium	<0.0050		0.0050		mg/L		02/27/23 08:21	02/28/23 18:45	1

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Client Sample Results

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

Job ID: 500-229904-1

Client Sample ID: MW-13

Lab Sample ID: 500-229904-4

Date Collected: 02/23/23 10:44

Matrix: Water

Date Received: 02/24/23 09:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.0010		0.0010		mg/L		02/27/23 08:21	02/28/23 18:45	1
Lead	<0.00050		0.00050		mg/L		02/27/23 08:21	02/28/23 18:45	1
Lithium	<0.010		0.010		mg/L		02/27/23 08:21	02/28/23 18:45	1
Molybdenum	0.020		0.0050		mg/L		02/27/23 08:21	02/28/23 18:45	1
Selenium	<0.0025		0.0025		mg/L		02/27/23 08:21	02/28/23 18:45	1
Thallium	<0.0020		0.0020		mg/L		02/27/23 08:21	02/28/23 18:45	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00033		0.00020		mg/L		03/03/23 14:45	03/06/23 11:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1700		10		mg/L			03/02/23 03:25	1
Chloride (SM 4500 Cl- E)	130		20		mg/L			03/06/23 12:33	10
Fluoride (SM 4500 F C)	0.42		0.10		mg/L			03/02/23 13:02	1
Sulfate (SM 4500 SO4 E)	660		500		mg/L			03/08/23 11:46	100

Client Sample ID: MW-14

Lab Sample ID: 500-229904-5

Date Collected: 02/22/23 15:23

Matrix: Water

Date Received: 02/25/23 09:30

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		02/27/23 08:21	02/28/23 18:49	1
Arsenic	0.015		0.0010		mg/L		02/27/23 08:21	02/28/23 18:49	1
Barium	0.067		0.0025		mg/L		02/27/23 08:21	02/28/23 18:49	1
Beryllium	<0.0010	^1+ ^+	0.0010		mg/L		02/27/23 08:21	02/28/23 18:49	1
Boron	2.2		0.50		mg/L		02/27/23 08:21	03/01/23 14:22	10
Cadmium	0.00085		0.00050		mg/L		02/27/23 08:21	02/28/23 18:49	1
Calcium	190		0.20		mg/L		02/27/23 08:21	02/28/23 18:49	1
Chromium	<0.0050		0.0050		mg/L		02/27/23 08:21	02/28/23 18:49	1
Cobalt	<0.0010		0.0010		mg/L		02/27/23 08:21	02/28/23 18:49	1
Lead	0.0015		0.00050		mg/L		02/27/23 08:21	02/28/23 18:49	1
Lithium	0.021		0.010		mg/L		02/27/23 08:21	02/28/23 18:49	1
Molybdenum	0.025		0.0050		mg/L		02/27/23 08:21	02/28/23 18:49	1
Selenium	0.024		0.0025		mg/L		02/27/23 08:21	02/28/23 18:49	1
Thallium	0.0020		0.0020		mg/L		02/27/23 08:21	02/28/23 18:49	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00022		0.00020		mg/L		03/03/23 14:45	03/06/23 11:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1700		10		mg/L			02/27/23 05:35	1
Chloride (SM 4500 Cl- E)	120		20		mg/L			03/06/23 12:34	10
Fluoride (SM 4500 F C)	0.76		0.10		mg/L			03/02/23 13:02	1
Sulfate (SM 4500 SO4 E)	600		250		mg/L			03/08/23 11:46	50

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Client Sample Results

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

Job ID: 500-229904-1

Client Sample ID: MW-21

Lab Sample ID: 500-229904-6

Date Collected: 02/22/23 08:25

Matrix: Water

Date Received: 02/25/23 09:30

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		02/27/23 08:21	02/28/23 18:52	1
Arsenic	0.019		0.0010		mg/L		02/27/23 08:21	02/28/23 18:52	1
Barium	0.46		0.0025		mg/L		02/27/23 08:21	02/28/23 18:52	1
Beryllium	<0.0010	^1+ ^+	0.0010		mg/L		02/27/23 08:21	02/28/23 18:52	1
Boron	0.33		0.050		mg/L		02/27/23 08:21	03/01/23 14:25	1
Cadmium	<0.00050		0.00050		mg/L		02/27/23 08:21	02/28/23 18:52	1
Calcium	160		0.20		mg/L		02/27/23 08:21	02/28/23 18:52	1
Chromium	<0.0050		0.0050		mg/L		02/27/23 08:21	02/28/23 18:52	1
Cobalt	0.013		0.0010		mg/L		02/27/23 08:21	02/28/23 18:52	1
Lead	<0.00050		0.00050		mg/L		02/27/23 08:21	02/28/23 18:52	1
Lithium	<0.010		0.010		mg/L		02/27/23 08:21	02/28/23 18:52	1
Molybdenum	<0.0050		0.0050		mg/L		02/27/23 08:21	02/28/23 18:52	1
Selenium	<0.0025		0.0025		mg/L		02/27/23 08:21	02/28/23 18:52	1
Thallium	<0.0020		0.0020		mg/L		02/27/23 08:21	02/28/23 18:52	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00072		0.00020		mg/L		03/03/23 14:45	03/06/23 11:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	750		10		mg/L			02/27/23 05:38	1
Chloride (SM 4500 Cl- E)	40		4.0		mg/L			03/06/23 12:34	2
Fluoride (SM 4500 F C)	0.16		0.10		mg/L			03/02/23 13:02	1
Sulfate (SM 4500 SO4 E)	9.3		5.0		mg/L			03/08/23 11:45	1

Definitions/Glossary

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

Job ID: 500-229904-1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.

Glossary

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

QC Association Summary

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

Job ID: 500-229904-1

Metals

Prep Batch: 700282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229904-1	MW-15	Total Recoverable	Water	3005A	
500-229904-2	MW-17	Total Recoverable	Water	3005A	
500-229904-3	Duplicate	Total Recoverable	Water	3005A	
500-229904-4	MW-13	Total Recoverable	Water	3005A	
500-229904-5	MW-14	Total Recoverable	Water	3005A	
500-229904-6	MW-21	Total Recoverable	Water	3005A	
MB 500-700282/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-700282/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 700664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229904-1	MW-15	Total Recoverable	Water	6020A	700282
500-229904-2	MW-17	Total Recoverable	Water	6020A	700282
500-229904-3	Duplicate	Total Recoverable	Water	6020A	700282
500-229904-4	MW-13	Total Recoverable	Water	6020A	700282
500-229904-5	MW-14	Total Recoverable	Water	6020A	700282
500-229904-6	MW-21	Total Recoverable	Water	6020A	700282
MB 500-700282/1-A	Method Blank	Total Recoverable	Water	6020A	700282
LCS 500-700282/2-A	Lab Control Sample	Total Recoverable	Water	6020A	700282

Analysis Batch: 700848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229904-1	MW-15	Total Recoverable	Water	6020A	700282
500-229904-2	MW-17	Total Recoverable	Water	6020A	700282
500-229904-3	Duplicate	Total Recoverable	Water	6020A	700282
500-229904-4	MW-13	Total Recoverable	Water	6020A	700282
500-229904-5	MW-14	Total Recoverable	Water	6020A	700282
500-229904-6	MW-21	Total Recoverable	Water	6020A	700282

Prep Batch: 701108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229904-1	MW-15	Total/NA	Water	7470A	
500-229904-2	MW-17	Total/NA	Water	7470A	
500-229904-3	Duplicate	Total/NA	Water	7470A	
500-229904-4	MW-13	Total/NA	Water	7470A	
500-229904-5	MW-14	Total/NA	Water	7470A	
500-229904-6	MW-21	Total/NA	Water	7470A	
MB 500-701108/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-701108/13-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 701281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229904-1	MW-15	Total/NA	Water	7470A	701108
500-229904-2	MW-17	Total/NA	Water	7470A	701108
500-229904-3	Duplicate	Total/NA	Water	7470A	701108
500-229904-4	MW-13	Total/NA	Water	7470A	701108
500-229904-5	MW-14	Total/NA	Water	7470A	701108
500-229904-6	MW-21	Total/NA	Water	7470A	701108
MB 500-701108/12-A	Method Blank	Total/NA	Water	7470A	701108
LCS 500-701108/13-A	Lab Control Sample	Total/NA	Water	7470A	701108

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QC Association Summary

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

Job ID: 500-229904-1

General Chemistry

Analysis Batch: 700232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229904-5	MW-14	Total/NA	Water	SM 2540C	
500-229904-6	MW-21	Total/NA	Water	SM 2540C	
MB 500-700232/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-700232/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 700763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229904-1	MW-15	Total/NA	Water	SM 2540C	
500-229904-2	MW-17	Total/NA	Water	SM 2540C	
500-229904-3	Duplicate	Total/NA	Water	SM 2540C	
500-229904-4	MW-13	Total/NA	Water	SM 2540C	
MB 500-700763/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-700763/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 700905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229904-1	MW-15	Total/NA	Water	SM 4500 SO4 E	
500-229904-2	MW-17	Total/NA	Water	SM 4500 SO4 E	
500-229904-3	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-700905/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-700905/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 700911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229904-1	MW-15	Total/NA	Water	SM 4500 F C	
500-229904-2	MW-17	Total/NA	Water	SM 4500 F C	
500-229904-3	Duplicate	Total/NA	Water	SM 4500 F C	
500-229904-4	MW-13	Total/NA	Water	SM 4500 F C	
500-229904-5	MW-14	Total/NA	Water	SM 4500 F C	
500-229904-6	MW-21	Total/NA	Water	SM 4500 F C	
MB 500-700911/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-700911/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-229904-4 MS	MW-13	Total/NA	Water	SM 4500 F C	
500-229904-4 MSD	MW-13	Total/NA	Water	SM 4500 F C	

Analysis Batch: 701276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229904-1	MW-15	Total/NA	Water	SM 4500 Cl- E	
500-229904-2	MW-17	Total/NA	Water	SM 4500 Cl- E	
500-229904-3	Duplicate	Total/NA	Water	SM 4500 Cl- E	
500-229904-4	MW-13	Total/NA	Water	SM 4500 Cl- E	
500-229904-5	MW-14	Total/NA	Water	SM 4500 Cl- E	
500-229904-6	MW-21	Total/NA	Water	SM 4500 Cl- E	
MB 500-701276/16	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-701276/17	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 701623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229904-4	MW-13	Total/NA	Water	SM 4500 SO4 E	
500-229904-5	MW-14	Total/NA	Water	SM 4500 SO4 E	
500-229904-6	MW-21	Total/NA	Water	SM 4500 SO4 E	

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QC Association Summary

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

Job ID: 500-229904-1

General Chemistry (Continued)

Analysis Batch: 701623 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-701623/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-701623/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-229904-6 MS	MW-21	Total/NA	Water	SM 4500 SO4 E	
500-229904-6 MSD	MW-21	Total/NA	Water	SM 4500 SO4 E	

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

QC Sample Results

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

Job ID: 500-229904-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-700282/1-A
Matrix: Water
Analysis Batch: 700664

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 700282

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/27/23 08:21	02/28/23 17:12	1
Arsenic	<0.0010		0.0010		mg/L		02/27/23 08:21	02/28/23 17:12	1
Barium	<0.0025		0.0025		mg/L		02/27/23 08:21	02/28/23 17:12	1
Beryllium	<0.0010	^1+ ^+	0.0010		mg/L		02/27/23 08:21	02/28/23 17:12	1
Boron	<0.050		0.050		mg/L		02/27/23 08:21	02/28/23 17:12	1
Cadmium	<0.00050		0.00050		mg/L		02/27/23 08:21	02/28/23 17:12	1
Calcium	<0.20		0.20		mg/L		02/27/23 08:21	02/28/23 17:12	1
Chromium	<0.0050		0.0050		mg/L		02/27/23 08:21	02/28/23 17:12	1
Cobalt	<0.0010		0.0010		mg/L		02/27/23 08:21	02/28/23 17:12	1
Lead	<0.00050		0.00050		mg/L		02/27/23 08:21	02/28/23 17:12	1
Lithium	<0.010		0.010		mg/L		02/27/23 08:21	02/28/23 17:12	1
Molybdenum	<0.0050		0.0050		mg/L		02/27/23 08:21	02/28/23 17:12	1
Selenium	<0.0025		0.0025		mg/L		02/27/23 08:21	02/28/23 17:12	1
Thallium	<0.0020		0.0020		mg/L		02/27/23 08:21	02/28/23 17:12	1

Lab Sample ID: LCS 500-700282/2-A
Matrix: Water
Analysis Batch: 700664

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 700282

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.500	0.535		mg/L		107	80 - 120
Arsenic	0.100	0.0952		mg/L		95	80 - 120
Barium	2.00	2.05		mg/L		102	80 - 120
Beryllium	0.0500	0.0479	^1+ ^+	mg/L		96	80 - 120
Boron	1.00	0.983		mg/L		98	80 - 120
Cadmium	0.0500	0.0497		mg/L		99	80 - 120
Calcium	10.0	9.80		mg/L		98	80 - 120
Chromium	0.200	0.204		mg/L		102	80 - 120
Cobalt	0.500	0.512		mg/L		102	80 - 120
Lead	0.100	0.107		mg/L		107	80 - 120
Lithium	0.500	0.481		mg/L		96	80 - 120
Molybdenum	1.00	0.964		mg/L		96	80 - 120
Selenium	0.100	0.100		mg/L		100	80 - 120
Thallium	0.100	0.107		mg/L		107	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-701108/12-A
Matrix: Water
Analysis Batch: 701281

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 701108

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/03/23 14:45	03/06/23 10:23	1

QC Sample Results

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

Job ID: 500-229904-1

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

Lab Sample ID: LCS 500-701108/13-A
Matrix: Water
Analysis Batch: 701281

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 701108

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00198	0.00214		mg/L		108	80 - 120

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

Lab Sample ID: MB 500-700232/1
Matrix: Water
Analysis Batch: 700232

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			02/27/23 04:39	1

Lab Sample ID: LCS 500-700232/2
Matrix: Water
Analysis Batch: 700232

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

Lab Sample ID: MB 500-700763/1
Matrix: Water
Analysis Batch: 700763

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			03/02/23 02:49	1

Lab Sample ID: LCS 500-700763/2
Matrix: Water
Analysis Batch: 700763

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	246		mg/L		98	80 - 120

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-701276/16
Matrix: Water
Analysis Batch: 701276

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			03/06/23 12:29	1

Lab Sample ID: LCS 500-701276/17
Matrix: Water
Analysis Batch: 701276

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

QC Sample Results

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

Job ID: 500-229904-1

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-700911/31
Matrix: Water
Analysis Batch: 700911

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			03/02/23 13:02	1

Lab Sample ID: LCS 500-700911/32
Matrix: Water
Analysis Batch: 700911

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: 500-229904-4 MS
Matrix: Water
Analysis Batch: 700911

Client Sample ID: MW-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.42		5.00	5.47		mg/L		101	75 - 125

Lab Sample ID: 500-229904-4 MSD
Matrix: Water
Analysis Batch: 700911

Client Sample ID: MW-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.42		5.00	5.46		mg/L		101	75 - 125	0	20

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-700905/16
Matrix: Water
Analysis Batch: 700905

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			03/02/23 12:53	1

Lab Sample ID: LCS 500-700905/17
Matrix: Water
Analysis Batch: 700905

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	21.3		mg/L		107	88 - 123

Lab Sample ID: MB 500-701623/16
Matrix: Water
Analysis Batch: 701623

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			03/08/23 11:44	1

QC Sample Results

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

Job ID: 500-229904-1

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

Lab Sample ID: LCS 500-701623/17
Matrix: Water
Analysis Batch: 701623

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	21.5		mg/L		108	88 - 123

Lab Sample ID: 500-229904-6 MS
Matrix: Water
Analysis Batch: 701623

Client Sample ID: MW-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	9.3		20.0	27.6		mg/L		92	75 - 125

Lab Sample ID: 500-229904-6 MSD
Matrix: Water
Analysis Batch: 701623

Client Sample ID: MW-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	9.3		20.0	27.6		mg/L		91	75 - 125	0	20



Client Information Client Contact: <u>Kaelyn Sperte</u>	500-229904 COC	Sampler: <u>Kaelyn Sperte</u> Phone: <u>212-278 1621</u>	Lab PM: <u>Mockler Diana J</u> E-Mail: <u>Diana.Mockler@et.eurofins.com</u>	Carrier Tracking No(s)	COC No: <u>500-109815-44026 1</u>
Company: <u>KPRG and Associates, Inc.</u>	FWSID:	Analysis Requested			Page: <u>Page 1 of 1</u>

Address: <u>414 Plaza Drive Suite 106</u>	Due Date Requested: <u>Standard</u>	Job #: <u>500-229904</u> Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Tnzma Z - other (specify)
City: <u>Westmont</u>	TAT Requested (days): <u>Standard</u>	
State, Zip: <u>IL, 60559</u>	Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Phone: <u>262-781-0475(Tel)</u>	PO #: <u>4502081030</u>	
Email: <u>kaelyns@kprginc.com</u>	VVO #:	
Project Name: <u>Powerton CCR MCB</u>	Project #: <u>50018578</u>	Total Number of Containers: Other:
S.e:	SSOW#:	

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	Preservation Code					Special Instructions/Note	
					N	D	D	D	D		
1 MW-15	2/23/23	0843	G	Water	N	N	X	X	X	X	
				Water							
2 MW-17	2/23/23	0939	G	Water	N	N	X	X	X	X	
				Water							
				Water							
3 Duplicate	2/23/23	-	G	Water	N	N	X	X	X	X	
4 MW-13	2/23/23	1044	G	Water	N	N	X	X	X	X	
				Water							

Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months
Deliverable Requested I II III IV Other (specify)	Special Instructions/QC Requirements.

Empty Kit Relinquished by: <u>Kaelyn Sperte</u>	Date: <u>2/23/23/1645</u>	Company: <u>KPRG</u>	Received by: <u>FedEx</u>	Date/Time: <u>2/23/23/1645</u>	Company: <u>FedEx</u>
Relinquished by:	Date/Time:	Company:	Received by: <u>[Signature]</u>	Date/Time: <u>2/23/23 0950</u>	Company: <u>ETA</u>
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: <u>(-0.8 -1.0) (-1.4 -1.6)</u>			

ORIGIN ID:PIAA (000) 000-0000

KPRG AND ASSOCIATES
414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 24FEB23
ACTWGT: 36.00 LB
CAD: 6994779/SSFE2401
DIMS: 24x18x12 IN

BILL THIRD PARTY

Part 0100007-416 RTR22-21P-0029

TO **SAMPLE RECEIVING
EUROFINS CHICAGO
2417 BOND ST**

UNIVERSITY PARK IL 60484

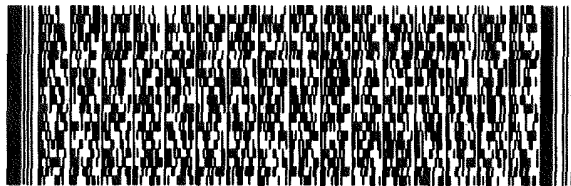
(708) 634-5200

REF:

INV:
PO:

DEPT:

11 0000 1115 00000001 10 0000 000 0000 0000 0000



1 of 2

TRK# 3950 2849 9898
0201

MASTER

XO JOTA

**SATURDAY 12:00P
PRIORITY OVERNIGHT**

**60484
IL-US ORD**



DR S



ery **FedEx® Saturday Deliv**



500-229904 Waybr

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- 11
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Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-229904-1

Login Number: 229904

List Number: 1

Creator: James, Jeff A

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	-1.0, -1.6, 1.6 (samples not frozen)
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 MCB

Job ID: 500-229904-1

Client Sample ID: MW-15
Date Collected: 02/23/23 08:43
Date Received: 02/24/23 09:50

Lab Sample ID: 500-229904-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			700282	BDE	EET CHI	02/27/23 08:21 - 02/27/23 08:51 ¹
Total Recoverable	Analysis	6020A		1	700664	FXG	EET CHI	02/28/23 18:35
Total Recoverable	Prep	3005A			700282	BDE	EET CHI	02/27/23 08:21 - 02/27/23 08:51 ¹
Total Recoverable	Analysis	6020A		5	700848	FXG	EET CHI	03/01/23 14:08
Total/NA	Prep	7470A			701108	MJG	EET CHI	03/03/23 14:45 - 03/03/23 16:45 ¹
Total/NA	Analysis	7470A		1	701281	MJG	EET CHI	03/06/23 10:39
Total/NA	Analysis	SM 2540C		1	700763	CLB	EET CHI	03/02/23 03:17
Total/NA	Analysis	SM 4500 CI- E		20	701276	LP	EET CHI	03/06/23 12:33
Total/NA	Analysis	SM 4500 F C		1	700911	EH	EET CHI	03/02/23 13:02
Total/NA	Analysis	SM 4500 SO4 E		50	700905	LP	EET CHI	03/02/23 13:00

Client Sample ID: MW-17
Date Collected: 02/23/23 09:39
Date Received: 02/24/23 09:50

Lab Sample ID: 500-229904-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			700282	BDE	EET CHI	02/27/23 08:21 - 02/27/23 08:51 ¹
Total Recoverable	Analysis	6020A		1	700664	FXG	EET CHI	02/28/23 18:38
Total Recoverable	Prep	3005A			700282	BDE	EET CHI	02/27/23 08:21 - 02/27/23 08:51 ¹
Total Recoverable	Analysis	6020A		5	700848	FXG	EET CHI	03/01/23 14:11
Total/NA	Prep	7470A			701108	MJG	EET CHI	03/03/23 14:45 - 03/03/23 16:45 ¹
Total/NA	Analysis	7470A		1	701281	MJG	EET CHI	03/06/23 10:41
Total/NA	Analysis	SM 2540C		1	700763	CLB	EET CHI	03/02/23 03:20
Total/NA	Analysis	SM 4500 CI- E		10	701276	LP	EET CHI	03/06/23 12:33
Total/NA	Analysis	SM 4500 F C		1	700911	EH	EET CHI	03/02/23 13:02
Total/NA	Analysis	SM 4500 SO4 E		50	700905	LP	EET CHI	03/02/23 13:00

Client Sample ID: Duplicate
Date Collected: 02/23/23 00:00
Date Received: 02/24/23 09:50

Lab Sample ID: 500-229904-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			700282	BDE	EET CHI	02/27/23 08:21 - 02/27/23 08:51 ¹
Total Recoverable	Analysis	6020A		1	700664	FXG	EET CHI	02/28/23 18:42
Total Recoverable	Prep	3005A			700282	BDE	EET CHI	02/27/23 08:21 - 02/27/23 08:51 ¹
Total Recoverable	Analysis	6020A		10	700848	FXG	EET CHI	03/01/23 14:15
Total/NA	Prep	7470A			701108	MJG	EET CHI	03/03/23 14:45 - 03/03/23 16:45 ¹
Total/NA	Analysis	7470A		1	701281	MJG	EET CHI	03/06/23 11:14
Total/NA	Analysis	SM 2540C		1	700763	CLB	EET CHI	03/02/23 03:22
Total/NA	Analysis	SM 4500 CI- E		10	701276	LP	EET CHI	03/06/23 12:33
Total/NA	Analysis	SM 4500 F C		1	700911	EH	EET CHI	03/02/23 13:02
Total/NA	Analysis	SM 4500 SO4 E		100	700905	LP	EET CHI	03/02/23 13:01

Lab Chronicle

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

Job ID: 500-229904-1

Client Sample ID: MW-13

Date Collected: 02/23/23 10:44

Date Received: 02/24/23 09:50

Lab Sample ID: 500-229904-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			700282	BDE	EET CHI	02/27/23 08:21 - 02/27/23 08:51 ¹
Total Recoverable	Analysis	6020A		1	700664	FXG	EET CHI	02/28/23 18:45
Total Recoverable	Prep	3005A			700282	BDE	EET CHI	02/27/23 08:21 - 02/27/23 08:51 ¹
Total Recoverable	Analysis	6020A		10	700848	FXG	EET CHI	03/01/23 14:18
Total/NA	Prep	7470A			701108	MJG	EET CHI	03/03/23 14:45 - 03/03/23 16:45 ¹
Total/NA	Analysis	7470A		1	701281	MJG	EET CHI	03/06/23 11:17
Total/NA	Analysis	SM 2540C		1	700763	CLB	EET CHI	03/02/23 03:25
Total/NA	Analysis	SM 4500 CI- E		10	701276	LP	EET CHI	03/06/23 12:33
Total/NA	Analysis	SM 4500 F C		1	700911	EH	EET CHI	03/02/23 13:02
Total/NA	Analysis	SM 4500 SO4 E		100	701623	LP	EET CHI	03/08/23 11:46

Client Sample ID: MW-14

Date Collected: 02/22/23 15:23

Date Received: 02/25/23 09:30

Lab Sample ID: 500-229904-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			700282	BDE	EET CHI	02/27/23 08:21 - 02/27/23 08:51 ¹
Total Recoverable	Analysis	6020A		1	700664	FXG	EET CHI	02/28/23 18:49
Total Recoverable	Prep	3005A			700282	BDE	EET CHI	02/27/23 08:21 - 02/27/23 08:51 ¹
Total Recoverable	Analysis	6020A		10	700848	FXG	EET CHI	03/01/23 14:22
Total/NA	Prep	7470A			701108	MJG	EET CHI	03/03/23 14:45 - 03/03/23 16:45 ¹
Total/NA	Analysis	7470A		1	701281	MJG	EET CHI	03/06/23 11:19
Total/NA	Analysis	SM 2540C		1	700232	CLB	EET CHI	02/27/23 05:35
Total/NA	Analysis	SM 4500 CI- E		10	701276	LP	EET CHI	03/06/23 12:34
Total/NA	Analysis	SM 4500 F C		1	700911	EH	EET CHI	03/02/23 13:02
Total/NA	Analysis	SM 4500 SO4 E		50	701623	LP	EET CHI	03/08/23 11:46

Client Sample ID: MW-21

Date Collected: 02/22/23 08:25

Date Received: 02/25/23 09:30

Lab Sample ID: 500-229904-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			700282	BDE	EET CHI	02/27/23 08:21 - 02/27/23 08:51 ¹
Total Recoverable	Analysis	6020A		1	700664	FXG	EET CHI	02/28/23 18:52
Total Recoverable	Prep	3005A			700282	BDE	EET CHI	02/27/23 08:21 - 02/27/23 08:51 ¹
Total Recoverable	Analysis	6020A		1	700848	FXG	EET CHI	03/01/23 14:25
Total/NA	Prep	7470A			701108	MJG	EET CHI	03/03/23 14:45 - 03/03/23 16:45 ¹
Total/NA	Analysis	7470A		1	701281	MJG	EET CHI	03/06/23 11:26
Total/NA	Analysis	SM 2540C		1	700232	CLB	EET CHI	02/27/23 05:38
Total/NA	Analysis	SM 4500 CI- E		2	701276	LP	EET CHI	03/06/23 12:34
Total/NA	Analysis	SM 4500 F C		1	700911	EH	EET CHI	03/02/23 13:02
Total/NA	Analysis	SM 4500 SO4 E		1	701623	LP	EET CHI	03/08/23 11:45

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

Lab Chronicle

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

Job ID: 500-229904-1

Laboratory References:

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

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Accreditation/Certification Summary

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

Job ID: 500-229904-1

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 3/30/2023 8:12:02 AM

JOB DESCRIPTION

Powerton CCR MCB (RAD)

JOB NUMBER

500-229904-2

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



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Authorized for release by
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(219)252-7570



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Case Narrative

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

Job ID: 500-229904-2

Job ID: 500-229904-2

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-229904-2

Receipt

The samples were received on 2/24/2023 9:50 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 -1.6° C, -1.0° C and 1.6° C.

RAD

Methods 903.0, 9315: Radium-226 batch 602183

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-14 (500-229904-5), MW-21 (500-229904-6), (LCS 160-602183/2-A), (MB 160-602183/1-A), (240-180920-K-1-A), (240-180920-B-1-A MS), (240-180920-L-1-A MSD), (310-250316-D-3-A), (310-250316-D-3-B MS) and (310-250316-D-3-C MSD)

Methods 903.0, 9315: Radium 226 batch 602039

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-15 (500-229904-1), MW-17 (500-229904-2), Duplicate (500-229904-3), MW-13 (500-229904-4), (LCS 160-602039/2-A), (MB 160-602039/1-A), (500-229879-E-5-A) and (500-229879-D-5-A DU)

Methods 904.0, 9320: Radium-228 batch 602041

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-15 (500-229904-1), MW-17 (500-229904-2), Duplicate (500-229904-3), MW-13 (500-229904-4), (LCS 160-602041/2-A), (MB 160-602041/1-A), (500-229879-E-5-B) and (500-229879-D-5-B DU)

Methods 904.0, 9320: Radium-228 batch 602192

The LCS recovered at (130%). The limits in our LIMS system at 75-125 reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of (62-148%) per method requirements. The LCS passes, no further action is required. (LCS 160-602192/2-A)

Methods 904.0, 9320: Radium-228 batch 602192

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-14 (500-229904-5), MW-21 (500-229904-6), (LCS 160-602192/2-A), (MB 160-602192/1-A), (240-180920-K-1-B), (240-180920-B-1-B MS) and (240-180920-L-1-B MSD)

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 MCB (RAD)

Job ID: 500-229904-2

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 MCB (RAD)

Job ID: 500-229904-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-229904-1	MW-15	Water	02/23/23 08:43	02/24/23 09:50
500-229904-2	MW-17	Water	02/23/23 09:39	02/24/23 09:50
500-229904-3	Duplicate	Water	02/23/23 00:00	02/24/23 09:50
500-229904-4	MW-13	Water	02/23/23 10:44	02/24/23 09:50
500-229904-5	MW-14	Water	02/22/23 15:23	02/25/23 09:30
500-229904-6	MW-21	Water	02/22/23 08:25	02/25/23 09:30

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Client Sample Results

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

Job ID: 500-229904-2

Client Sample ID: MW-15

Lab Sample ID: 500-229904-1

Date Collected: 02/23/23 08:43

Matrix: Water

Date Received: 02/24/23 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	0.209		0.0876	0.0896	1.00	0.0954	pCi/L	03/01/23 10:36	03/28/23 15:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		30 - 110					03/01/23 10:36	03/28/23 15:39	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	<0.579	U	0.381	0.384	1.00	0.579	pCi/L	03/01/23 11:14	03/09/23 11:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		30 - 110					03/01/23 11:14	03/09/23 11:59	1
Y Carrier	82.6		30 - 110					03/01/23 11:14	03/09/23 11:59	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	0.725		0.391	0.394	5.00	0.579	pCi/L		03/30/23 00:22	1

Client Sample ID: MW-17

Lab Sample ID: 500-229904-2

Date Collected: 02/23/23 09:39

Matrix: Water

Date Received: 02/24/23 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	<0.124	U	0.0642	0.0642	1.00	0.124	pCi/L	03/01/23 10:36	03/28/23 15:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.5		30 - 110					03/01/23 10:36	03/28/23 15:39	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	<0.547	U	0.329	0.329	1.00	0.547	pCi/L	03/01/23 11:14	03/09/23 12:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.5		30 - 110					03/01/23 11:14	03/09/23 12:00	1
Y Carrier	80.0		30 - 110					03/01/23 11:14	03/09/23 12:00	1

Client Sample Results

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

Job ID: 500-229904-2

Client Sample ID: MW-17

Date Collected: 02/23/23 09:39

Date Received: 02/24/23 09:50

Lab Sample ID: 500-229904-2

Matrix: Water

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	<0.547	U	0.335	0.335	5.00	0.547	pCi/L		03/30/23 00:22	1

Client Sample ID: Duplicate

Date Collected: 02/23/23 00:00

Date Received: 02/24/23 09:50

Lab Sample ID: 500-229904-3

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.240		0.125	0.126	1.00	0.151	pCi/L	03/01/23 10:36	03/28/23 15:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	68.6		30 - 110					03/01/23 10:36	03/28/23 15:39	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	<0.799	U	0.474	0.475	1.00	0.799	pCi/L	03/01/23 11:14	03/09/23 12:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	68.6		30 - 110					03/01/23 11:14	03/09/23 12:00	1
Y Carrier	84.5		30 - 110					03/01/23 11:14	03/09/23 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	<0.799	U	0.490	0.491	5.00	0.799	pCi/L		03/30/23 00:22	1

Client Sample ID: MW-13

Date Collected: 02/23/23 10:44

Date Received: 02/24/23 09:50

Lab Sample ID: 500-229904-4

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.373		0.131	0.136	1.00	0.127	pCi/L	03/01/23 10:36	03/28/23 15:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.2		30 - 110					03/01/23 10:36	03/28/23 15:39	1

Client Sample Results

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

Job ID: 500-229904-2

Client Sample ID: MW-13

Date Collected: 02/23/23 10:44

Date Received: 02/24/23 09:50

Lab Sample ID: 500-229904-4

Matrix: Water

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	0.776		0.474	0.479	1.00	0.687	pCi/L	03/01/23 11:14	03/09/23 12:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.2		30 - 110					03/01/23 11:14	03/09/23 12:00	1
Y Carrier	89.0		30 - 110					03/01/23 11:14	03/09/23 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	1.15		0.492	0.498	5.00	0.687	pCi/L		03/30/23 00:22	1

Client Sample ID: MW-14

Date Collected: 02/22/23 15:23

Date Received: 02/25/23 09:30

Lab Sample ID: 500-229904-5

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.194		0.0941	0.0958	1.00	0.114	pCi/L	03/02/23 09:21	03/27/23 16:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.9		30 - 110					03/02/23 09:21	03/27/23 16:09	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.552	U	0.334	0.335	1.00	0.552	pCi/L	03/02/23 09:53	03/13/23 12:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.9		30 - 110					03/02/23 09:53	03/13/23 12:16	1
Y Carrier	85.2		30 - 110					03/02/23 09:53	03/13/23 12:16	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	<0.552	U	0.347	0.348	5.00	0.552	pCi/L		03/28/23 13:07	1

Euofins Chicago

Client Sample Results

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

Job ID: 500-229904-2

Client Sample ID: MW-21

Lab Sample ID: 500-229904-6

Date Collected: 02/22/23 08:25

Matrix: Water

Date Received: 02/25/23 09:30

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	0.456		0.161	0.166	1.00	0.172	pCi/L	03/02/23 09:21	03/27/23 16:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	72.9		30 - 110					03/02/23 09:21	03/27/23 16:10	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	<0.861	U	0.498	0.498	1.00	0.861	pCi/L	03/02/23 09:53	03/13/23 12:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	72.9		30 - 110					03/02/23 09:53	03/13/23 12:16	1
Y Carrier	87.9		30 - 110					03/02/23 09:53	03/13/23 12:16	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	<0.861	U	0.523	0.525	5.00	0.861	pCi/L		03/28/23 13:07	1

Definitions/Glossary

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

Job ID: 500-229904-2

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 MCB (RAD)

Job ID: 500-229904-2

Rad

Prep Batch: 602039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229904-1	MW-15	Total/NA	Water	PrecSep-21	
500-229904-2	MW-17	Total/NA	Water	PrecSep-21	
500-229904-3	Duplicate	Total/NA	Water	PrecSep-21	
500-229904-4	MW-13	Total/NA	Water	PrecSep-21	
MB 160-602039/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-602039/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 602041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229904-1	MW-15	Total/NA	Water	PrecSep_0	
500-229904-2	MW-17	Total/NA	Water	PrecSep_0	
500-229904-3	Duplicate	Total/NA	Water	PrecSep_0	
500-229904-4	MW-13	Total/NA	Water	PrecSep_0	
MB 160-602041/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-602041/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 602183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229904-5	MW-14	Total/NA	Water	PrecSep-21	
500-229904-6	MW-21	Total/NA	Water	PrecSep-21	
MB 160-602183/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-602183/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 602192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229904-5	MW-14	Total/NA	Water	PrecSep_0	
500-229904-6	MW-21	Total/NA	Water	PrecSep_0	
MB 160-602192/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-602192/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

QC Sample Results

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

Job ID: 500-229904-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-602039/1-A
Matrix: Water
Analysis Batch: 605277

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602039

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	<0.100	U	0.0423	0.0423	1.00	0.100	pCi/L	03/01/23 10:36	03/28/23 08:38	1
Carrier	MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	MB Qualifier	30 - 110					03/01/23 10:36	03/28/23 08:38	1
	91.5									

Lab Sample ID: LCS 160-602039/2-A
Matrix: Water
Analysis Batch: 605277

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602039

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	11.79		1.18	1.00	0.0931	pCi/L	104	75 - 125
Carrier	LCS		Limits						
Ba Carrier	%Yield	LCS Qualifier	30 - 110						
	91.0								

Lab Sample ID: MB 160-602183/1-A
Matrix: Water
Analysis Batch: 605096

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602183

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	<0.0873	U	0.0446	0.0446	1.00	0.0873	pCi/L	03/02/23 09:21	03/27/23 10:07	1
Carrier	MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	MB Qualifier	30 - 110					03/02/23 09:21	03/27/23 10:07	1
	94.4									

Lab Sample ID: LCS 160-602183/2-A
Matrix: Water
Analysis Batch: 605096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602183

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	12.27		1.26	1.00	0.132	pCi/L	108	75 - 125
Carrier	LCS		Limits						
Ba Carrier	%Yield	LCS Qualifier	30 - 110						
	85.6								

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-602041/1-A
Matrix: Water
Analysis Batch: 602892

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602041

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	<0.525	U	0.346	0.349	1.00	0.525	pCi/L	03/01/23 11:14	03/09/23 11:53	1

Euofins Chicago

QC Sample Results

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

Job ID: 500-229904-2

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

Carrier	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Yield	Qualifier				
Ba Carrier	91.5		30 - 110	03/01/23 11:14	03/09/23 11:53	1
Y Carrier	81.9		30 - 110	03/01/23 11:14	03/09/23 11:53	1

Lab Sample ID: LCS 160-602041/2-A
Matrix: Water
Analysis Batch: 602892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602041

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	91.0		30 - 110
Y Carrier	80.7		30 - 110

Lab Sample ID: MB 160-602192/1-A
Matrix: Water
Analysis Batch: 603500

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602192

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac

Carrier	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Yield	Qualifier				
Ba Carrier	94.4		30 - 110	03/02/23 09:53	03/13/23 12:02	1
Y Carrier	85.2		30 - 110	03/02/23 09:53	03/13/23 12:02	1

Lab Sample ID: LCS 160-602192/2-A
Matrix: Water
Analysis Batch: 603500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602192

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	85.6		30 - 110
Y Carrier	86.0		30 - 110



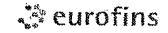
Client Information		500-229904 COC		Sampler <i>Kaelyn Sperte</i>		Lab PM Mockler Diana J		Carrier Tracking No(s)		COC No: 500-109815-44026 1	
Client Contact: <i>Kaelyn Sperte</i>		Phone <i>2103-278 1621</i>		E-Mail: Diana.Mockler@et.eurofins.com		State of Origin: <i>IL</i>				Page: Page 1 of 1	
Company KPRG and Associates, Inc.		FWSID:		Analysis Requested						Job #: <i>500-229904</i>	
Address: 414 Plaza Drive Suite 106		Due Date Requested: <i>Standard</i>		TAT Requested (days) <i>Standard</i>		Compliance Project. <input type="checkbox"/> Yes <input type="checkbox"/> No		Preservation Codes		Other:	
City: Westmont		PO #: 4502081030		VVO #:		Project #: 50018578		Project Name: Powerton CCR MCB		S.e.:	
State, Zip IL, 60559		Phone: 262-781-0475(Tel)		Email: <i>kaelyns@kprginc.com</i>		SSOW#:		SOW#:		SOW#:	
Field Filtered Sample (Yes or No)		Perform MS/MS D (Yes or No)		2540C, 4500_F_C, SM4500_Cl_E, SM4500_SCA_E		903.0 - Radium 226		904.0 - Radium 228		Ra226Ra228_GFFC - Rad Combined	
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)		Total Number of Containers	
										Special Instructions/Note	
1 MW-15		2/23/23		0843		G		Water		N N X X X X X	
2 MW-17		2/23/23		0939		G		Water		N N X X X X X	
3 Duplicate		2/23/23		-		G		Water		N N X X X X X	
4 MW-13		2/23/23		1044		G		Water		N N X X X X X	
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)									
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months									
Deliverable Requested I II III IV Other (specify)		Special Instructions/QC Requirements.									
Empty Kit Relinquished by		Date		Time		Method of Shipment:					
Relinquished by <i>Kaelyn Sperte</i>		Date/Time: 2/23/23/1645		Company: KPRG		Received by: <i>FedEx</i>		Date/Time: 2/23/23/1645		Company: FedEx	
Relinquished by		Date/Time:		Company:		Received by: <i>[Signature]</i>		Date/Time: 2/23/23 0950		Company: ETA	
Relinquished by		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: <i>(-0.8 -1.0) (-1.4 -1.6)</i>							

Eurofins Chicago


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

Chain of Custody Record

MKE 232



Environmental Test, Inc.

Client Information		Sampler: <i>Kaelyn Sperte</i>		Lab PM: Mockler Diana J		Carrier Tracking No(s)		COC No: 500-109815-44026 1					
Client Contact: <i>Kaelyn Sperte</i>		Phone: <i>262-278-1621</i>		E-Mail: Diana Mockler@et eurofinsus.com		State of Origin: <i>IL</i>		Page: Page 1 of 1					
Company: KPRG and Associates Inc.		PWSID		Analysis Requested						Job #: <i>500-229904</i>			
Address: 414 Plaza Drive Suite 106		Due Date Requested: <i>Standard</i>		 500-229904 COC						Preservation Codes			
City: Westmont		TAT Requested (days): <i>Standard</i>								A - HCL		M - Hexane	
State, Zip: IL 60559		Compliance Project. <input type="checkbox"/> Yes <input type="checkbox"/> No								B - NaOH		N - None	
Phone: 262-781-0475(Tel)		PO #: 4502081030								C - Zn Acetate		O - AsNaO2	
Email: <i>kaelyns@kprginc.com</i>		WO #:								D - Nitric Acid		P - Na2O4S	
Project Name: Powerton CCR MCB		Project #: 50018578		E - NaHSO4		Q - Na2SO3		R - Na2S2O3					
S.e:		SSOV#:		F - MeOH		S - H2SO4		T - TSP Dodecahydrate					
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)		Total Number of Containers			
										Other:			
										Special Instructions/Note:			
5		<i>3/22/23</i>		<i>1523</i>		<i>G</i>		Water					
								Water					
								Water					
6		<i>2/22/23</i>		<i>0825</i>		<i>G</i>		Water					
								Water					
								Water					
								Water					
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)							
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological						<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Deliverable Requested I II III IV Other (specify)						Special Instructions/QC Requirements.							
Empty Kit Relinquished by				Date		Time		Method of Shipment:					
Relinquished by: <i>Kaelyn Sperte</i>				Date/Time: <i>2/24/23/1330</i>		Company: <i>KPRG</i>		Received by: <i>FedEx</i>		Date/Time: <i>2/24/23/1330</i>			
Relinquished by:				Date/Time:		Company:		Received by: <i>Stephanie Hernandez</i>		Date/Time: <i>2/25/23 0930</i>			
Relinquished by:				Date/Time:		Company:		Received by:		Date/Time:			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: <i>1.8-1.6</i>									

Do Not Use This Way

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

SHIP DATE: 23FEB23
ACTWGT: 46.55 LB
CAD: 6994780/SSF2401
DIMS: 24x13x14 IN

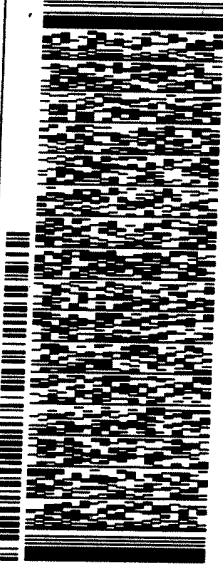
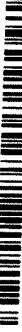
BILL THIRD PARTY

**TO EUROFINS CHICAGO
EUROFINS CHICAGO
2417 BOND ST**

UNIVERSITY PARK IL 60484

(708) 694-5200 REF: 0201

DEPT:



5 of 6

MPS# 3949 9426 6525
0201

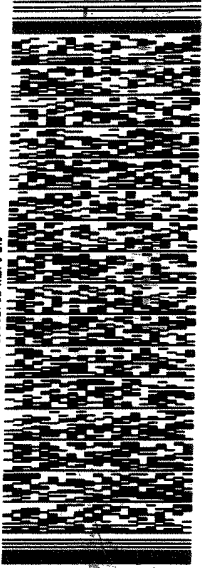
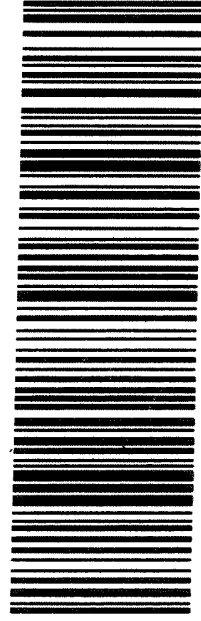
Met# 3949 9426 6488

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**FRI - 24 FEB 10:30A
PRIORITY OVERNIGHT**

AHS 60484
IL-US ORD



UNIVERSITY PARK IL 60484

(708) 694-5200 REF: 0201

DEPT:



**FRI - 24 FEB 10:30A
PRIORITY OVERNIGHT**

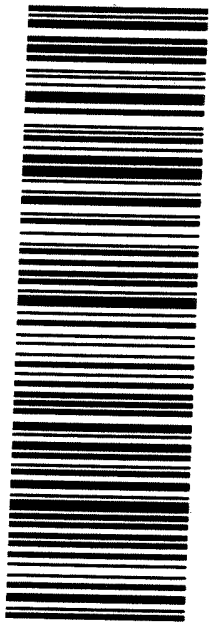
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TRK# 3949 9426 6488
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IL-US ORD



500-229904 Waybl

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ORIGIN ID:PIAA (000) 000-0000

KPRG AND ASSOCIATES
414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 24FEB23
ACTWGT: 36.00 LB
CAD: 6994779/SSFE2401
DIMS: 24x18x12 IN

BILL THIRD PARTY

Part 0100007-416 RTR22-21P-0029

TO **SAMPLE RECEIVING
EUROFINS CHICAGO
2417 BOND ST**

UNIVERSITY PARK IL 60484

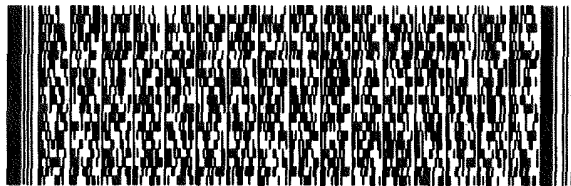
(708) 634-5200

REF:

INV:
PO:

DEPT:

11 0000 0101 00000000 10 1000 010 000000 0000 0000



1 of 2

TRK# 3950 2849 9898
0201

MASTER

XO JOTA

**SATURDAY 12:00P
PRIORITY OVERNIGHT**

**60484
IL-US ORD**



DR S



ery **FedEx® Saturday Deliv**



500-229904 Waybr

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Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Mockler, Diana J		COC No: 500-171207.1						
Client Contact: Shipping/Receiving		E-Mail: Diana.Mockler@et.eurofins.com		Page: 1 of 1						
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-229904-1						
Address: 13715 Rider Trail North, Earth City, MO, 63045		Due Date Requested: 3/16/2023		TAT Requested (days):						
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		PO #:		WO #:						
Project Name: Powerton CCR MCB		Project #: 50018578		SSOW#:						
Site:		Matrix (Water, Solid, Other, B-T, H, A, AL)		Preservation Code:						
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PreSep_21 Standard Target List	904.0/PreSep_0 Standard Target List	Ra226Ra228 GPPC	Total Number of Containers	Special Instructions/Note:
MW-15 (500-229904-1)	2/23/23	08:43 Central	Water	X	X	X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-17 (500-229904-2)	2/23/23	09:39 Central	Water	X	X	X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
Duplicate (500-229904-3)	2/23/23	Central	Water	X	X	X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-13 (500-229904-4)	2/23/23	10:44 Central	Water	X	X	X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no

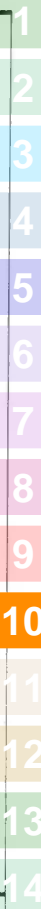
Analysis Requested

Preservation Codes:
 A - HCL
 B - NaOH
 C - Zn Acetate
 D - Nitric Acid
 E - NaHSO4
 F - MeOH
 G - Amchlor
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - EDA
 M - Hexane
 N - None
 O - AsNaO2
 P - Na2O4S
 Q - Na2SO3
 R - Na2SO3
 S - H2SO4
 T - TSP Dodecahydrate
 U - Acetone
 V - MCAA
 W - pH 4-5
 X - Trizma
 Y - EDTA
 Z - other (specify)
 Other:

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2
 Empty Kit Relinquished by: Date: Time: Method of Shipment: Return To Client Disposal By Lab Archive For Months

Relinquished by: *Stephanie Hemond* Date/Time: 2/24/23 1600 Company: *EEFA*
 Relinquished by: *FED EX* Date/Time: Date/Time: Company: *Company*
 Relinquished by: Date/Time: Company: *Company*

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



Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler: Mockler, Diana J	Lab PM: Mockler, Diana J	Carmer Tracking No(s): 500-171226.1	COC No: 500-171226.1
Shipping/Receiving		Phone:	E-Mail: Diana.Mockler@et.eurofinsus.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-229904-2	Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)
Address: 13715 Rider Trail North,		Due Date Requested: 3/16/2023	Analysis Requested		
City: Earth City		TAT Requested (days):	Total Number of Containers		
State, Zip: MO, 63045		PO #:	903.0/PreSep_21 Standard Target List		
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		WO #:	904.0/PreSep_0 Standard Target List		
Email:		Project #:	Perform MS/MSD (Yes or No)		
Project Name: Powerton CCR MCB (RAD)		SSOW#:	Field Filtered Sample (Yes or No)		
Site:			Ra226Ra228_GFPc		
			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		

Sample Identification - Client ID (Lab ID)

Sample ID	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=swab/coll, B=leach, A=AL)	Preservation Code	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PreSep_21 Standard Target List	904.0/PreSep_0 Standard Target List	Ra226Ra228_GFPc
MW-14 (500-229904-5)	2/22/23	15:23 Central		Water		X	X	X	X	
MW-21 (500-229904-6)	2/22/23	08:25 Central		Water		X	X	X	X	

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

Possible Hazard Identification
Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2

Special Instructions/QC Requirements: _____

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

Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____

Relinquished by: *[Signature]* Date: **2/27/23** Time: **0900** Company: **FED EX**

Relinquished by: *[Signature]* Date: **2/28/23** Time: **0900** Company: **FED EX**

Relinquished by: *[Signature]* Date: _____ Time: _____ Company: _____

Custody Seals Intact: Yes No Δ No Δ No Δ No Δ No

Cooler Temperature(s) °C and Other Remarks: _____



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-229904-2

Login Number: 229904

List Number: 1

Creator: James, Jeff A

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	-1.0, -1.6, 1.6 (samples not frozen)
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-229904-2

Login Number: 229904

List Number: 2

Creator: Worthington, Sierra M

List Source: Eurofins St. Louis

List Creation: 02/28/23 10:05 AM

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



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-229904-2

Login Number: 229904

List Number: 3

Creator: Worthington, Sierra M

List Source: Eurofins St. Louis

List Creation: 03/01/23 07:41 AM

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

Lab Chronicle

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

Job ID: 500-229904-2

Client Sample ID: MW-15

Date Collected: 02/23/23 08:43

Date Received: 02/24/23 09:50

Lab Sample ID: 500-229904-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			602039	DJP	EET SL	03/01/23 10:36
Total/NA	Analysis	903.0		1	605277	FLC	EET SL	03/28/23 15:39
Total/NA	Prep	PrecSep_0			602041	DJP	EET SL	03/01/23 11:14
Total/NA	Analysis	904.0		1	602892	FLC	EET SL	03/09/23 11:59
Total/NA	Analysis	Ra226_Ra228		1	605594	EMH	EET SL	03/30/23 00:22

Client Sample ID: MW-17

Date Collected: 02/23/23 09:39

Date Received: 02/24/23 09:50

Lab Sample ID: 500-229904-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			602039	DJP	EET SL	03/01/23 10:36
Total/NA	Analysis	903.0		1	605277	FLC	EET SL	03/28/23 15:39
Total/NA	Prep	PrecSep_0			602041	DJP	EET SL	03/01/23 11:14
Total/NA	Analysis	904.0		1	602892	FLC	EET SL	03/09/23 12:00
Total/NA	Analysis	Ra226_Ra228		1	605594	EMH	EET SL	03/30/23 00:22

Client Sample ID: Duplicate

Date Collected: 02/23/23 00:00

Date Received: 02/24/23 09:50

Lab Sample ID: 500-229904-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			602039	DJP	EET SL	03/01/23 10:36
Total/NA	Analysis	903.0		1	605277	FLC	EET SL	03/28/23 15:39
Total/NA	Prep	PrecSep_0			602041	DJP	EET SL	03/01/23 11:14
Total/NA	Analysis	904.0		1	602892	FLC	EET SL	03/09/23 12:00
Total/NA	Analysis	Ra226_Ra228		1	605594	EMH	EET SL	03/30/23 00:22

Client Sample ID: MW-13

Date Collected: 02/23/23 10:44

Date Received: 02/24/23 09:50

Lab Sample ID: 500-229904-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			602039	DJP	EET SL	03/01/23 10:36
Total/NA	Analysis	903.0		1	605277	FLC	EET SL	03/28/23 15:39
Total/NA	Prep	PrecSep_0			602041	DJP	EET SL	03/01/23 11:14
Total/NA	Analysis	904.0		1	602892	FLC	EET SL	03/09/23 12:00
Total/NA	Analysis	Ra226_Ra228		1	605594	EMH	EET SL	03/30/23 00:22

Lab Chronicle

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

Job ID: 500-229904-2

Client Sample ID: MW-14

Date Collected: 02/22/23 15:23

Date Received: 02/25/23 09:30

Lab Sample ID: 500-229904-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			602183	DJP	EET SL	03/02/23 09:21
Total/NA	Analysis	903.0		1	605096	FLC	EET SL	03/27/23 16:09
Total/NA	Prep	PrecSep_0			602192	DJP	EET SL	03/02/23 09:53
Total/NA	Analysis	904.0		1	603501	FLC	EET SL	03/13/23 12:16
Total/NA	Analysis	Ra226_Ra228		1	605252	EMH	EET SL	03/28/23 13:07

Client Sample ID: MW-21

Date Collected: 02/22/23 08:25

Date Received: 02/25/23 09:30

Lab Sample ID: 500-229904-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			602183	DJP	EET SL	03/02/23 09:21
Total/NA	Analysis	903.0		1	605095	FLC	EET SL	03/27/23 16:10
Total/NA	Prep	PrecSep_0			602192	DJP	EET SL	03/02/23 09:53
Total/NA	Analysis	904.0		1	603501	FLC	EET SL	03/13/23 12:16
Total/NA	Analysis	Ra226_Ra228		1	605252	EMH	EET SL	03/28/23 13:07

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 MCB (RAD)

Job ID: 500-229904-2

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

- 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 MCB (RAD)

Job ID: 500-229904-2

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)
500-229904-1	MW-15	85.0
500-229904-2	MW-17	82.5
500-229904-3	Duplicate	68.6
500-229904-4	MW-13	82.2
500-229904-5	MW-14	87.9
500-229904-6	MW-21	72.9
LCS 160-602039/2-A	Lab Control Sample	91.0
LCS 160-602183/2-A	Lab Control Sample	85.6
MB 160-602039/1-A	Method Blank	91.5
MB 160-602183/1-A	Method Blank	94.4

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)
500-229904-1	MW-15	85.0	82.6
500-229904-2	MW-17	82.5	80.0
500-229904-3	Duplicate	68.6	84.5
500-229904-4	MW-13	82.2	89.0
500-229904-5	MW-14	87.9	85.2
500-229904-6	MW-21	72.9	87.9
LCS 160-602041/2-A	Lab Control Sample	91.0	80.7
LCS 160-602192/2-A	Lab Control Sample	85.6	86.0
MB 160-602041/1-A	Method Blank	91.5	81.9
MB 160-602192/1-A	Method Blank	94.4	85.2

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

PROJECT NAME	NRG - POWERTON STATION - 12313.1		DATE	2/20/23
Sample Name	MW-21	Start Time	1520	
Condition of Well	good			
Water Level	31.48	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow Bladder Pump	Purge Characteristics	clear	
Volume Removed	1 gal	WL at Sample Time	31.65	
Method of Sample	Low-Flow Bladder Pump	Sample Characteristics	clear w/ sl. brown tint	
Sample Analysis	CCR MCB	Sample Time	2/22/2023/0825	
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)
1528	31.48	8.28	14.1	1.311	5.30	95.1	23.85
1533	-	7.26	14.3	1.295	2.71	57.9	23.05
1538	-	7.15	14.0	1.288	2.32	19.1	22.58
1543	-	7.11	14.0	1.277	2.20	-2.6	25.36
1548	31.65	7.10	13.7	1.270	2.10	-16.0	25.99

SAMPLING NOTES:

FINISHED MCB SAMPLING EXCEPT RADIIUM 2010 1 L BOTTLE. SENT OTHER SAMPLES WILL ATTEMPT TO FINISH FILLING BOTTLE AT LATER DATE. OML COMING OUT OF WELL OVER 30 MIN ATTEMPT. DTB = 32.90', 1.25' WATER IN WELL.

Sampler Name and Company:

KPRG and Associates

KLS

PROJECT NAME	NRG - POWERTON STATION - 12313.1		DATE	2/21/23
Sample Name	MW-14	Start Time	1514	
Condition of Well	good			
Water Level	30.91	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow Bladder Pump	Purge Characteristics	Clear	
Volume Removed	1 qt	WL at Sample Time	214 - 32.21	
Method of Sample	Low-Flow Bladder Pump	Sample Characteristics		
Sample Analysis	CCA & CCR-MCB	Sample Time	CCR MCB: 2/22/23/1523 CCA:	
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)
1521	30.91	8.82	11.7	2.409	7.31	98.8	30.01
1526	-	7.72	12.1	2.378	4.08	101.8	28.45
1531	-	7.52	11.8	2.365	3.41	102.8	16.82
1536	-	7.47	11.3	2.350	3.33	103.6	9.54
1541	32.21	7.40	11.2	2.347	3.23	104.4	7.33

SAMPLING NOTES:

DTB 33.5' - 1.29' of water left in well when finished sampling MCB samples. Able to get water but flow rate > 5 mL/purge cycle (40:20). Did not sample CCA, will let well recharge & try at later date.

Sampler Name and Company:

KPRG and Associates

KLS

PROJECT NAME	NRG - POWERTON STATION - 12313.1		DATE	2/23/23
Sample Name	MW-15	Start Time	0828	
Condition of Well	good			
Water Level	25.24	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow Bladder Pump	Purge Characteristics	cloudy, brown/orange to clear	
Volume Removed	5 gals	WL at Sample Time	25.65	
Method of Sample	Low-Flow Bladder Pump	Sample Characteristics	clear	
Sample Analysis	CCA, CCR ABBASB & MCB	Sample Time	MCB: 2/23/23 0843 ABBASB: 2/23/23 0813 CCA: 2/24/23/0830	
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)
0830	25.24	8.49	14.4	2.212	7.80	121.0	122.54
0833	-	7.96	14.5	2.028	7.98	124.3	124.1
0836	-	7.64	14.8	2.046	2.09	106.4	33.80
0839	-	7.55	14.9	2.058	1.73	91.0	59.78
0842	25.65	7.52	14.8	2.077	1.61	81.7	21.36

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

KLS

PROJECT NAME	NRG - POWERTON STATION - 12313.1		DATE	2/23/23
Sample Name	MW-17	Start Time	0925	
Condition of Well	good			
Water Level	20.12	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow Bladder Pump	Purge Characteristics	cloudy, brown	
Volume Removed	4.5 gts	WL at Sample Time	23.83	
Method of Sample	Low-Flow Bladder Pump	Sample Characteristics	clear	
Sample Analysis	CCP! MCB & ABBASIS	Sample Time	0939	
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)
0926	20.12	8.52	13.9	2.243	6.86	77.9	282.75
0929	-	8.06	14.5	2.317	3.62	79.7	206.00
0932	-	7.93	14.7	2.310	2.18	78.2	64.00
0935	-	7.89	14.6	2.287	1.67	77.4	33.31
0938	23.83	7.87	14.6	2.247	1.35	76.7	20.65

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

KLS

PROJECT NAME	NRG - POWERTON STATION - 12313.1		DATE	2/23/23
Sample Name	MW-13	Start Time	1029	
Condition of Well	good			
Water Level	32.02	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow Bladder Pump	Purge Characteristics	cloudy, black	
Volume Removed	6 gts	WL at Sample Time	32.43	
Method of Sample	Low-Flow Bladder Pump	Sample Characteristics	clear w/ gray tint	
Sample Analysis	CCA & CCR MCB	Sample Time	1044	
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)
1031	32.02	8.13	12.9	2.345	9.03	85.9	40.88
1034	-	8.12	14.1	2.375	4.64	80.3	352.09
1037	-	8.26	14.3	2.395	2.48	12.7	176.59
1040	-	8.35	14.0	2.391	1.95	-54.7	63.29
1043	-	8.38	13.9	2.392	1.44	-122.1	31.05
1046	32.43	8.38	14.0	2.392	1.30	-143.8	23.89

SAMPLING NOTES:

MCB duplicate

Sampler Name and Company:

KPRG and Associates

KLS