

## **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 3<sup>rd</sup> quarter 2022 which includes the entire list of parameters specified under Section 845.600(a)(1) and (b). Table 1 is a summary table of all available CCR monitoring data to date including any data generated previously as part of the Federal CCR Rule monitoring. 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-21 was not sampled as it was determined there was not a sufficient enough 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	< ^1+ 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	F1 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	
MW-15 (CL) down-gradient	11/18/2015	1.5	270	H 210	H 0.53	6.55	H 1400	H 2400	< 0.003	0.03	0.096	^< 0.001	0.00061	< 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	
	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	
	8/18/2016	1.5	200	F1 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	
	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	
	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	
	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	
	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	
	8/29/2017	2.2	190	200	0.53	6.87	540	1800	< 0.003	0.0018	0.044	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.023	< 0.0002	0.032	< 0.377	0.0092	< 0.002	
	11/10/2017	1.6	170	180	0.63	7.09	530	1500	< 0.003	0.0063	0.046	< 0.001	< 0.0005	< 0.0050	< 0.0010	< 0.0005	0.025	< 0.0002	0.02	< 0.313	0.016	< 0.002	
	5/17/2018	2.3	200	160	0.5	6.75	680	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	
	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	
	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	
	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	
	4/29/2020	1.2	160	200	0.58	6.90	370	1300	< 0.003	NA	0.036	0.06	NA	< 0.0005	NA	< 0.0010	< 0.0005	0.027	< 0.0002	0.023	< 0.578	< 0.0025	< 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	
	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	
	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	
	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	
	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	^1+ 0.028	< 0.0002	0.018	< 0.511	0.009	< 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		
2/9/2022	0.84	140	200	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	0.0025	< 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		
8/31/2022	1.5	B 210	270	0.5	6.80	550	1900	< 0.003	0.0054	0.057	< 0.001	< 0.0005	< 0.005	< 0.001	< 0.0005	0.03	< 0.0002	0.022	< 0.548	0.008	< 0.002		
MW-17 (CL) up-gradient	11/19/2015	1.6	210	H 230	H 0.43	7.11	H 850	H 1800	< 0.003	0.0028	0.14	^< 0.001	< 0.0005	< 0.005	0.0012	0.0012	0.019	H < 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	0.0012	1.07	< 0.0002	0.093	< 0.107	< 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	< 0.005	0.0015	< 0.0005	0.026	< 0.0002	0.12	8.27	< 0.0025	0.0028	
	8/15/2016	1.1	220	220	0.60	7.08	860	2100	< 0.003	0.001	0.12	< 0.001	0.001	< 0.005	0.0016	< 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	0.0012	< 0.0005	0.022	< 0.0002	0.042	3.76	< 0.0025	0.0021	
	2/13/2017	1.6	190	230	0.56	6.84	770	1600	< 0.003	0.35	0.16	< 0.001	0.00093	< 0.005	0.0014	< 0.0005	0.019	< 0.0002	0.088	2.08	< 0.0025	0.0025	
	5/4/2017	1.2	170	210	0.61	7.29	720	1500	< 0.003	0.24	0.39	0.0013	0.0023	< 0.005	0.0023	0.00066	0.016	< 0.0002	0.036	1.91	< 0.0025	0.0065	
	6/22/2017	0.95	150	230	0.72	7.38	580	1600	< 0.003	0.41	0.13	< 0.001	0.0007	< 0.005	0.0012	0.0011	0.022	< 0.0002	0.11	1.21	< 0.0025	0.0022	
	8/29/2017	1.4	190	230	0.64	7.19	640	1900	< 0.003	0.24	0.092	< 0.001	< 0.0005	< 0.005	< 0.001	0.00058	0.021	< 0.0002	0.13	3.32	< 0.0025	0.0025	
	11/6/2017	1.7	190	240	0.62	7.27	840	1800	< 0.003	0.17	0.38	< 0.001	0.0022	< 0.005	0.0015	< 0.0005	< 0.01	< 0.0002	0.019	2.54	< 0.0025	0.0075	
	5/14/2018	1.6	170	220	0.6	7.79	800																

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	
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	
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	
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	
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	
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	NS	

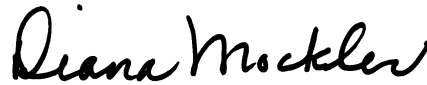
## ANALYTICAL REPORT

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

Laboratory Job ID: 500-221621-1  
Client Project/Site: Powerton CCR MCB

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

Attn: Richard Gnat



Authorized for release by:  
9/29/2022 9:33:53 AM

Diana Mockler, Project Manager I  
(219)252-7570

[Diana.Mockler@et.eurofinsus.com](mailto:Diana.Mockler@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Method Summary . . . . .	4
Sample Summary . . . . .	5
Client Sample Results . . . . .	6
Definitions . . . . .	10
QC Association . . . . .	11
QC Sample Results . . . . .	14
Chain of Custody . . . . .	19
Receipt Checklists . . . . .	23
Chronicle . . . . .	24
Certification Summary . . . . .	27

# Case Narrative

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

Job ID: 500-221621-1

**Job ID: 500-221621-1**

**Laboratory: Eurofins Chicago**

## Narrative

### Job Narrative 500-221621-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 9/1/2022 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 12.3° C and 14.0° C.

#### Receipt Exceptions

The following sample(s) was received at the laboratory outside the required temperature criteria: Samples #1-5 for TDS, Chloride, Fluoride and Sulfate. No ice in cooler just water. Receiving cooler temp 14.0° C .

#### Metals

Method 6020A: The method blank for preparation batch 500-673175 and analytical batch 500-673884 contained Calcium above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6020A: The continuing calibration verification (CCV) associated with batch 674091 recovered above the upper control limit for Li. The reported samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

#### General Chemistry

Method SM 2540C: The following sample was analyzed outside of analytical holding time due to the sample bottle was accidentally dropped. The bottle leaked and volume was lost. The sample was analyzed with the remaining sample: MW-20 (500-221621-6).

Method SM 4500 Cl- E: Due to the high concentration of Chloride, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 500-673960 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Methods 9038, SM 4500 SO4 E: Due to the high concentration of Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 500-673965 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method SM 4500 SO4 E: Due to the high concentration of Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 500-673965 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

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

Job ID: 500-221621-1

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: 500-221621-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-221621-1	MW-15	Water	08/31/22 12:31	09/01/22 09:30
500-221621-2	MW-14	Water	08/31/22 16:13	09/01/22 09:30
500-221621-3	MW-17	Water	08/31/22 14:04	09/01/22 09:30
500-221621-4	Duplicate	Water	08/31/22 00:00	09/01/22 09:30
500-221621-5	MW-13	Water	08/31/22 15:08	09/01/22 09:30
500-221621-6	MW-20	Water	09/01/22 10:15	09/02/22 10:00

1

2

3

4

5

6

7

8

9

10

11

12

13



# Client Sample Results

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

Job ID: 500-221621-1

**Client Sample ID: MW-15**

**Lab Sample ID: 500-221621-1**

Date Collected: 08/31/22 12:31

Matrix: Water

Date Received: 09/01/22 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		09/06/22 08:22	09/08/22 22:26	1
<b>Arsenic</b>	<b>0.0054</b>		0.0010		mg/L		09/06/22 08:22	09/08/22 22:26	1
<b>Barium</b>	<b>0.057</b>		0.0025		mg/L		09/06/22 08:22	09/08/22 22:26	1
Beryllium	<0.0010		0.0010		mg/L		09/06/22 08:22	09/08/22 22:26	1
<b>Boron</b>	<b>1.5</b>		0.25		mg/L		09/06/22 08:22	09/09/22 17:23	5
Cadmium	<0.00050		0.00050		mg/L		09/06/22 08:22	09/08/22 22:26	1
<b>Calcium</b>	<b>210</b>	<b>B</b>	0.20		mg/L		09/06/22 08:22	09/08/22 22:26	1
Chromium	<0.0050		0.0050		mg/L		09/06/22 08:22	09/08/22 22:26	1
Cobalt	<0.0010		0.0010		mg/L		09/06/22 08:22	09/08/22 22:26	1
Lead	<0.00050		0.00050		mg/L		09/06/22 08:22	09/08/22 22:26	1
<b>Lithium</b>	<b>0.030</b>		0.010		mg/L		09/06/22 08:22	09/13/22 12:48	1
<b>Molybdenum</b>	<b>0.022</b>		0.0050		mg/L		09/06/22 08:22	09/08/22 22:26	1
<b>Selenium</b>	<b>0.0080</b>		0.0025		mg/L		09/06/22 08:22	09/08/22 22:26	1
Thallium	<0.0020		0.0020		mg/L		09/06/22 08:22	09/08/22 22:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/12/22 10:20	09/13/22 09:16	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>1900</b>		10		mg/L			09/07/22 17:16	1
<b>Chloride</b>	<b>270</b>		20		mg/L			09/09/22 17:31	10
<b>Fluoride</b>	<b>0.50</b>		0.10		mg/L			09/10/22 15:01	1
<b>Sulfate</b>	<b>550</b>		250		mg/L			09/09/22 19:21	50

**Client Sample ID: MW-14**

**Lab Sample ID: 500-221621-2**

Date Collected: 08/31/22 16:13

Matrix: Water

Date Received: 09/01/22 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		09/06/22 08:22	09/08/22 22:29	1
<b>Arsenic</b>	<b>0.0040</b>		0.0010		mg/L		09/06/22 08:22	09/08/22 22:29	1
<b>Barium</b>	<b>0.056</b>		0.0025		mg/L		09/06/22 08:22	09/08/22 22:29	1
Beryllium	<0.0010		0.0010		mg/L		09/06/22 08:22	09/08/22 22:29	1
<b>Boron</b>	<b>2.2</b>		0.25		mg/L		09/06/22 08:22	09/09/22 17:26	5
Cadmium	<0.00050		0.00050		mg/L		09/06/22 08:22	09/08/22 22:29	1
<b>Calcium</b>	<b>200</b>	<b>B</b>	0.20		mg/L		09/06/22 08:22	09/08/22 22:29	1
Chromium	<0.0050		0.0050		mg/L		09/06/22 08:22	09/08/22 22:29	1
Cobalt	<0.0010		0.0010		mg/L		09/06/22 08:22	09/08/22 22:29	1
Lead	<0.00050		0.00050		mg/L		09/06/22 08:22	09/08/22 22:29	1
<b>Lithium</b>	<b>0.027</b>		0.010		mg/L		09/06/22 08:22	09/13/22 12:51	1
<b>Molybdenum</b>	<b>0.024</b>		0.0050		mg/L		09/06/22 08:22	09/08/22 22:29	1
Selenium	<0.0025		0.0025		mg/L		09/06/22 08:22	09/08/22 22:29	1
Thallium	<0.0020		0.0020		mg/L		09/06/22 08:22	09/08/22 22:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/12/22 10:20	09/13/22 09:25	1

Eurofins Chicago

# Client Sample Results

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

Job ID: 500-221621-1

**Client Sample ID: MW-14**  
Date Collected: 08/31/22 16:13  
Date Received: 09/01/22 09:30

**Lab Sample ID: 500-221621-2**  
Matrix: Water

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1800		10		mg/L			09/07/22 17:16	1
Chloride	120		20		mg/L			09/09/22 17:31	10
Fluoride	0.86		0.10		mg/L			09/10/22 15:04	1
Sulfate	610		250		mg/L			09/09/22 19:22	50

**Client Sample ID: MW-17**  
Date Collected: 08/31/22 14:04  
Date Received: 09/01/22 09:30

**Lab Sample ID: 500-221621-3**  
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		09/06/22 08:22	09/08/22 22:33	1
Arsenic	0.0042		0.0010		mg/L		09/06/22 08:22	09/08/22 22:33	1
Barium	0.029		0.0025		mg/L		09/06/22 08:22	09/08/22 22:33	1
Beryllium	<0.0010		0.0010		mg/L		09/06/22 08:22	09/08/22 22:33	1
Boron	0.89		0.050		mg/L		09/06/22 08:22	09/09/22 17:36	1
Cadmium	<0.00050		0.00050		mg/L		09/06/22 08:22	09/08/22 22:33	1
Calcium	140	B	0.20		mg/L		09/06/22 08:22	09/08/22 22:33	1
Chromium	<0.0050		0.0050		mg/L		09/06/22 08:22	09/08/22 22:33	1
Cobalt	<0.0010		0.0010		mg/L		09/06/22 08:22	09/08/22 22:33	1
Lead	<0.00050		0.00050		mg/L		09/06/22 08:22	09/08/22 22:33	1
Lithium	0.017		0.010		mg/L		09/06/22 08:22	09/13/22 12:55	1
Molybdenum	0.022		0.0050		mg/L		09/06/22 08:22	09/08/22 22:33	1
Selenium	<0.0025		0.0025		mg/L		09/06/22 08:22	09/08/22 22:33	1
Thallium	<0.0020		0.0020		mg/L		09/06/22 08:22	09/08/22 22:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/12/22 10:20	09/13/22 09:27	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1300		10		mg/L			09/07/22 17:16	1
Chloride	170		20		mg/L			09/09/22 17:48	10
Fluoride	0.71		0.10		mg/L			09/10/22 15:06	1
Sulfate	440		250		mg/L			09/09/22 19:22	50

**Client Sample ID: Duplicate**  
Date Collected: 08/31/22 00:00  
Date Received: 09/01/22 09:30

**Lab Sample ID: 500-221621-4**  
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		09/06/22 08:22	09/08/22 22:36	1
Arsenic	0.0056		0.0010		mg/L		09/06/22 08:22	09/08/22 22:36	1
Barium	0.055		0.0025		mg/L		09/06/22 08:22	09/08/22 22:36	1
Beryllium	<0.0010		0.0010		mg/L		09/06/22 08:22	09/08/22 22:36	1
Boron	1.4		0.25		mg/L		09/06/22 08:22	09/09/22 17:40	5
Cadmium	<0.00050		0.00050		mg/L		09/06/22 08:22	09/08/22 22:36	1
Calcium	200	B	0.20		mg/L		09/06/22 08:22	09/08/22 22:36	1
Chromium	<0.0050		0.0050		mg/L		09/06/22 08:22	09/08/22 22:36	1

Eurofins Chicago

# Client Sample Results

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

Job ID: 500-221621-1

**Client Sample ID: Duplicate**

**Lab Sample ID: 500-221621-4**

Date Collected: 08/31/22 00:00

Matrix: Water

Date Received: 09/01/22 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.0010		0.0010		mg/L		09/06/22 08:22	09/08/22 22:36	1
Lead	<0.00050		0.00050		mg/L		09/06/22 08:22	09/08/22 22:36	1
Lithium	0.029		0.010		mg/L		09/06/22 08:22	09/13/22 12:58	1
Molybdenum	0.022		0.0050		mg/L		09/06/22 08:22	09/08/22 22:36	1
Selenium	0.0070		0.0025		mg/L		09/06/22 08:22	09/08/22 22:36	1
Thallium	<0.0020		0.0020		mg/L		09/06/22 08:22	09/08/22 22:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/12/22 10:20	09/13/22 09:29	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1900		10		mg/L			09/07/22 17:16	1
Chloride	270		20		mg/L			09/09/22 17:49	10
Fluoride	0.50		0.10		mg/L			09/10/22 15:09	1
Sulfate	570		250		mg/L			09/09/22 19:22	50

**Client Sample ID: MW-13**

**Lab Sample ID: 500-221621-5**

Date Collected: 08/31/22 15:08

Matrix: Water

Date Received: 09/01/22 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		09/06/22 08:22	09/08/22 22:46	1
Arsenic	0.022		0.0010		mg/L		09/06/22 08:22	09/08/22 22:46	1
Barium	0.19		0.0025		mg/L		09/06/22 08:22	09/08/22 22:46	1
Beryllium	<0.0010		0.0010		mg/L		09/06/22 08:22	09/08/22 22:46	1
Boron	2.9		0.25		mg/L		09/06/22 08:22	09/09/22 17:43	5
Cadmium	<0.00050		0.00050		mg/L		09/06/22 08:22	09/08/22 22:46	1
Calcium	250	B	0.20		mg/L		09/06/22 08:22	09/08/22 22:46	1
Chromium	<0.0050		0.0050		mg/L		09/06/22 08:22	09/08/22 22:46	1
Cobalt	<0.0010		0.0010		mg/L		09/06/22 08:22	09/08/22 22:46	1
Lead	<0.00050		0.00050		mg/L		09/06/22 08:22	09/08/22 22:46	1
Lithium	<0.010		0.010		mg/L		09/06/22 08:22	09/13/22 13:01	1
Molybdenum	0.019		0.0050		mg/L		09/06/22 08:22	09/08/22 22:46	1
Selenium	<0.0025		0.0025		mg/L		09/06/22 08:22	09/08/22 22:46	1
Thallium	<0.0020		0.0020		mg/L		09/06/22 08:22	09/08/22 22:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/12/22 10:20	09/13/22 09:35	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1900		10		mg/L			09/07/22 17:16	1
Chloride	110		20		mg/L			09/09/22 17:49	10
Fluoride	0.39		0.10		mg/L			09/10/22 15:11	1
Sulfate	790	F1	500		mg/L			09/09/22 19:23	100

Eurofins Chicago

# Client Sample Results

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

Job ID: 500-221621-1

**Client Sample ID: MW-20**

**Lab Sample ID: 500-221621-6**

Date Collected: 09/01/22 10:15

Matrix: Water

Date Received: 09/02/22 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		09/06/22 08:22	09/08/22 22:50	1
<b>Arsenic</b>	<b>0.0013</b>		0.0010		mg/L		09/06/22 08:22	09/08/22 22:50	1
<b>Barium</b>	<b>0.12</b>		0.0025		mg/L		09/06/22 08:22	09/08/22 22:50	1
Beryllium	<0.0010		0.0010		mg/L		09/06/22 08:22	09/08/22 22:50	1
<b>Boron</b>	<b>2.0</b>		0.25		mg/L		09/06/22 08:22	09/09/22 17:47	5
Cadmium	<0.00050		0.00050		mg/L		09/06/22 08:22	09/08/22 22:50	1
<b>Calcium</b>	<b>230 B</b>		0.20		mg/L		09/06/22 08:22	09/08/22 22:50	1
Chromium	<0.0050		0.0050		mg/L		09/06/22 08:22	09/08/22 22:50	1
<b>Cobalt</b>	<b>0.0012</b>		0.0010		mg/L		09/06/22 08:22	09/08/22 22:50	1
Lead	<0.00050		0.00050		mg/L		09/06/22 08:22	09/08/22 22:50	1
Lithium	<0.010		0.010		mg/L		09/06/22 08:22	09/13/22 13:05	1
Molybdenum	<0.0050		0.0050		mg/L		09/06/22 08:22	09/08/22 22:50	1
Selenium	<0.0025		0.0025		mg/L		09/06/22 08:22	09/08/22 22:50	1
Thallium	<0.0020		0.0020		mg/L		09/06/22 08:22	09/08/22 22:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/12/22 10:20	09/13/22 09:37	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>110</b>		20		mg/L			09/09/22 17:49	10
<b>Sulfate</b>	<b>370</b>		250		mg/L			09/09/22 19:38	50

# Definitions/Glossary

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

Job ID: 500-221621-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.

### General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.

## Glossary

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

# QC Association Summary

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

Job ID: 500-221621-1

## Metals

### Prep Batch: 673175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221621-1	MW-15	Total Recoverable	Water	3005A	
500-221621-2	MW-14	Total Recoverable	Water	3005A	
500-221621-3	MW-17	Total Recoverable	Water	3005A	
500-221621-4	Duplicate	Total Recoverable	Water	3005A	
500-221621-5	MW-13	Total Recoverable	Water	3005A	
500-221621-6	MW-20	Total Recoverable	Water	3005A	
MB 500-673175/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-673175/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Analysis Batch: 673884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221621-1	MW-15	Total Recoverable	Water	6020A	673175
500-221621-2	MW-14	Total Recoverable	Water	6020A	673175
500-221621-3	MW-17	Total Recoverable	Water	6020A	673175
500-221621-4	Duplicate	Total Recoverable	Water	6020A	673175
500-221621-5	MW-13	Total Recoverable	Water	6020A	673175
500-221621-6	MW-20	Total Recoverable	Water	6020A	673175
MB 500-673175/1-A	Method Blank	Total Recoverable	Water	6020A	673175
LCS 500-673175/2-A	Lab Control Sample	Total Recoverable	Water	6020A	673175

### Analysis Batch: 674091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221621-1	MW-15	Total Recoverable	Water	6020A	673175
500-221621-2	MW-14	Total Recoverable	Water	6020A	673175
500-221621-3	MW-17	Total Recoverable	Water	6020A	673175
500-221621-4	Duplicate	Total Recoverable	Water	6020A	673175
500-221621-5	MW-13	Total Recoverable	Water	6020A	673175
500-221621-6	MW-20	Total Recoverable	Water	6020A	673175
MB 500-673175/1-A	Method Blank	Total Recoverable	Water	6020A	673175
LCS 500-673175/2-A	Lab Control Sample	Total Recoverable	Water	6020A	673175

### Prep Batch: 674142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221621-1	MW-15	Total/NA	Water	7470A	
500-221621-2	MW-14	Total/NA	Water	7470A	
500-221621-3	MW-17	Total/NA	Water	7470A	
500-221621-4	Duplicate	Total/NA	Water	7470A	
500-221621-5	MW-13	Total/NA	Water	7470A	
500-221621-6	MW-20	Total/NA	Water	7470A	
MB 500-674142/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-674142/15-A	Lab Control Sample	Total/NA	Water	7470A	
500-221621-1 MS	MW-15	Total/NA	Water	7470A	
500-221621-1 MSD	MW-15	Total/NA	Water	7470A	
500-221621-1 DU	MW-15	Total/NA	Water	7470A	

### Analysis Batch: 674381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221621-1	MW-15	Total/NA	Water	7470A	674142
500-221621-2	MW-14	Total/NA	Water	7470A	674142
500-221621-3	MW-17	Total/NA	Water	7470A	674142
500-221621-4	Duplicate	Total/NA	Water	7470A	674142

Eurofins Chicago

# QC Association Summary

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

Job ID: 500-221621-1

## Metals (Continued)

### Analysis Batch: 674381 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221621-5	MW-13	Total/NA	Water	7470A	674142
500-221621-6	MW-20	Total/NA	Water	7470A	674142
MB 500-674142/12-A	Method Blank	Total/NA	Water	7470A	674142
LCS 500-674142/15-A	Lab Control Sample	Total/NA	Water	7470A	674142
500-221621-1 MS	MW-15	Total/NA	Water	7470A	674142
500-221621-1 MSD	MW-15	Total/NA	Water	7470A	674142
500-221621-1 DU	MW-15	Total/NA	Water	7470A	674142

### Analysis Batch: 674440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221621-1	MW-15	Total Recoverable	Water	6020A	673175
500-221621-2	MW-14	Total Recoverable	Water	6020A	673175
500-221621-3	MW-17	Total Recoverable	Water	6020A	673175
500-221621-4	Duplicate	Total Recoverable	Water	6020A	673175
500-221621-5	MW-13	Total Recoverable	Water	6020A	673175
500-221621-6	MW-20	Total Recoverable	Water	6020A	673175

## General Chemistry

### Analysis Batch: 673534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221621-1	MW-15	Total/NA	Water	SM 2540C	
500-221621-2	MW-14	Total/NA	Water	SM 2540C	
500-221621-3	MW-17	Total/NA	Water	SM 2540C	
500-221621-4	Duplicate	Total/NA	Water	SM 2540C	
500-221621-5	MW-13	Total/NA	Water	SM 2540C	
MB 500-673534/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-673534/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-221621-3 MS	MW-17	Total/NA	Water	SM 2540C	
500-221621-3 DU	MW-17	Total/NA	Water	SM 2540C	

### Analysis Batch: 673960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221621-1	MW-15	Total/NA	Water	SM 4500 CI- E	
500-221621-2	MW-14	Total/NA	Water	SM 4500 CI- E	
500-221621-3	MW-17	Total/NA	Water	SM 4500 CI- E	
500-221621-4	Duplicate	Total/NA	Water	SM 4500 CI- E	
500-221621-5	MW-13	Total/NA	Water	SM 4500 CI- E	
500-221621-6	MW-20	Total/NA	Water	SM 4500 CI- E	
MB 500-673960/16	Method Blank	Total/NA	Water	SM 4500 CI- E	
MB 500-673960/52	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-673960/17	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
LCS 500-673960/53	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
500-221621-3 MS	MW-17	Total/NA	Water	SM 4500 CI- E	
500-221621-3 MSD	MW-17	Total/NA	Water	SM 4500 CI- E	

### Analysis Batch: 673965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221621-1	MW-15	Total/NA	Water	SM 4500 SO4 E	
500-221621-2	MW-14	Total/NA	Water	SM 4500 SO4 E	
500-221621-3	MW-17	Total/NA	Water	SM 4500 SO4 E	

Eurofins Chicago

# QC Association Summary

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

Job ID: 500-221621-1

## General Chemistry (Continued)

### Analysis Batch: 673965 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221621-4	Duplicate	Total/NA	Water	SM 4500 SO4 E	
500-221621-5	MW-13	Total/NA	Water	SM 4500 SO4 E	
500-221621-6	MW-20	Total/NA	Water	SM 4500 SO4 E	
MB 500-673965/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
MB 500-673965/49	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-673965/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
LCS 500-673965/50	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-221621-5 MS	MW-13	Total/NA	Water	SM 4500 SO4 E	
500-221621-5 MSD	MW-13	Total/NA	Water	SM 4500 SO4 E	

### Analysis Batch: 674042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221621-1	MW-15	Total/NA	Water	SM 4500 F C	
500-221621-2	MW-14	Total/NA	Water	SM 4500 F C	
500-221621-3	MW-17	Total/NA	Water	SM 4500 F C	
500-221621-4	Duplicate	Total/NA	Water	SM 4500 F C	
500-221621-5	MW-13	Total/NA	Water	SM 4500 F C	
MB 500-674042/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-674042/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	



# QC Sample Results

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

Job ID: 500-221621-1

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

**Lab Sample ID: MB 500-673175/1-A**  
**Matrix: Water**  
**Analysis Batch: 673884**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 673175**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0030		0.0030		mg/L		09/06/22 08:22	09/08/22 21:45	1
Arsenic	<0.0010		0.0010		mg/L		09/06/22 08:22	09/08/22 21:45	1
Barium	<0.0025		0.0025		mg/L		09/06/22 08:22	09/08/22 21:45	1
Beryllium	<0.0010		0.0010		mg/L		09/06/22 08:22	09/08/22 21:45	1
Cadmium	<0.00050		0.00050		mg/L		09/06/22 08:22	09/08/22 21:45	1
Calcium	0.219		0.20		mg/L		09/06/22 08:22	09/08/22 21:45	1
Chromium	<0.0050		0.0050		mg/L		09/06/22 08:22	09/08/22 21:45	1
Cobalt	<0.0010		0.0010		mg/L		09/06/22 08:22	09/08/22 21:45	1
Lead	<0.00050		0.00050		mg/L		09/06/22 08:22	09/08/22 21:45	1
Molybdenum	<0.0050		0.0050		mg/L		09/06/22 08:22	09/08/22 21:45	1
Selenium	<0.0025		0.0025		mg/L		09/06/22 08:22	09/08/22 21:45	1
Thallium	<0.0020		0.0020		mg/L		09/06/22 08:22	09/08/22 21:45	1

**Lab Sample ID: MB 500-673175/1-A**  
**Matrix: Water**  
**Analysis Batch: 674091**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 673175**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Boron	<0.050		0.050		mg/L		09/06/22 08:22	09/09/22 17:16	1
Lithium	<0.010	^+	0.010		mg/L		09/06/22 08:22	09/09/22 17:16	1

**Lab Sample ID: LCS 500-673175/2-A**  
**Matrix: Water**  
**Analysis Batch: 673884**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 673175**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.100	0.103		mg/L		103	80 - 120
Barium	0.500	0.555		mg/L		111	80 - 120
Beryllium	0.0500	0.0569		mg/L		114	80 - 120
Cadmium	0.0500	0.0529		mg/L		106	80 - 120
Calcium	10.0	11.0		mg/L		110	80 - 120
Chromium	0.200	0.226		mg/L		113	80 - 120
Cobalt	0.500	0.567		mg/L		113	80 - 120
Lead	0.100	0.114		mg/L		114	80 - 120
Molybdenum	1.00	1.01		mg/L		101	80 - 120
Selenium	0.100	0.104		mg/L		104	80 - 120
Thallium	0.100	0.114		mg/L		114	80 - 120

**Lab Sample ID: LCS 500-673175/2-A**  
**Matrix: Water**  
**Analysis Batch: 674091**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 673175**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	0.100	0.110	^+	mg/L		110	80 - 120

# QC Sample Results

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

Job ID: 500-221621-1

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 500-674142/12-A**  
**Matrix: Water**  
**Analysis Batch: 674381**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 674142**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/12/22 10:20	09/13/22 07:49	1

**Lab Sample ID: LCS 500-674142/15-A**  
**Matrix: Water**  
**Analysis Batch: 674381**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 674142**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00200	0.00171		mg/L		86	80 - 120

**Lab Sample ID: 500-221621-1 MS**  
**Matrix: Water**  
**Analysis Batch: 674381**

**Client Sample ID: MW-15**  
**Prep Type: Total/NA**  
**Prep Batch: 674142**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.00020		0.00100	0.000967		mg/L		97	75 - 125

**Lab Sample ID: 500-221621-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 674381**

**Client Sample ID: MW-15**  
**Prep Type: Total/NA**  
**Prep Batch: 674142**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.00020		0.00100	0.000932		mg/L		93	75 - 125	4	20

**Lab Sample ID: 500-221621-1 DU**  
**Matrix: Water**  
**Analysis Batch: 674381**

**Client Sample ID: MW-15**  
**Prep Type: Total/NA**  
**Prep Batch: 674142**

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

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

**Lab Sample ID: MB 500-673534/1**  
**Matrix: Water**  
**Analysis Batch: 673534**

**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			09/07/22 17:16	1

**Lab Sample ID: LCS 500-673534/2**  
**Matrix: Water**  
**Analysis Batch: 673534**

**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	500	484		mg/L		97	80 - 120

# QC Sample Results

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

Job ID: 500-221621-1

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

Lab Sample ID: 500-221621-3 MS  
Matrix: Water  
Analysis Batch: 673534

Client Sample ID: MW-17  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1300		500	1660		mg/L		76	75 - 125

Lab Sample ID: 500-221621-3 DU  
Matrix: Water  
Analysis Batch: 673534

Client Sample ID: MW-17  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1300		1260		mg/L		2	5

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

Lab Sample ID: MB 500-673960/16  
Matrix: Water  
Analysis Batch: 673960

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			09/09/22 17:23	1

Lab Sample ID: MB 500-673960/52  
Matrix: Water  
Analysis Batch: 673960

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			09/09/22 17:48	1

Lab Sample ID: LCS 500-673960/17  
Matrix: Water  
Analysis Batch: 673960

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

Lab Sample ID: LCS 500-673960/53  
Matrix: Water  
Analysis Batch: 673960

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	20.0		mg/L		100	85 - 115

Lab Sample ID: 500-221621-3 MS  
Matrix: Water  
Analysis Batch: 673960

Client Sample ID: MW-17  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	170		20.0	183	4	mg/L		68	75 - 125

# QC Sample Results

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

Job ID: 500-221621-1

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

Lab Sample ID: 500-221621-3 MSD  
Matrix: Water  
Analysis Batch: 673960

Client Sample ID: MW-17  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	170		20.0	183	4	mg/L		66	75 - 125	0	20

## Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-674042/31  
Matrix: Water  
Analysis Batch: 674042

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			09/10/22 14:28	1

Lab Sample ID: LCS 500-674042/32  
Matrix: Water  
Analysis Batch: 674042

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	10.8		mg/L		108	90 - 119

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

Lab Sample ID: MB 500-673965/16  
Matrix: Water  
Analysis Batch: 673965

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			09/09/22 19:01	1

Lab Sample ID: MB 500-673965/49  
Matrix: Water  
Analysis Batch: 673965

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			09/09/22 19:22	1

Lab Sample ID: LCS 500-673965/17  
Matrix: Water  
Analysis Batch: 673965

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	20.0	20.9		mg/L		105	88 - 123

Lab Sample ID: LCS 500-673965/50  
Matrix: Water  
Analysis Batch: 673965

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	21.1		mg/L		106	88 - 123

# QC Sample Results

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

Job ID: 500-221621-1

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

**Lab Sample ID: 500-221621-5 MS**  
**Matrix: Water**  
**Analysis Batch: 673965**

**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
Sulfate	790	F1	20.0	889	4	mg/L		496	75 - 125

**Lab Sample ID: 500-221621-5 MSD**  
**Matrix: Water**  
**Analysis Batch: 673965**

**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
Sulfate	790	F1	20.0	790	4	mg/L		-3	75 - 125	12	20







<b>Client Information</b>		Sampler <b>Kaelyn Spene</b>		Lab PM Mockler Diana J		Carrier Tracking No(s)		COC No. 500-104269-44026 1													
Client Contact Mitchel Dolan		Phone <b>262-278-1621</b>		E-Mail Diana.Mockler@et.eurofins.com		State of Origin <b>IL</b>		Page Page 1 of 1													
Company KPRG and Associates Inc.		PWSID		<b>Analysis Requested</b>						Job # <b>500-221621</b>											
Address 414 Plaza Drive Suite 106 City Westmont State Zip IL 60559		Due Date Requested <b>Standard</b>		TAT Requested (days) <b>standard</b>		Compliance Project. <input type="checkbox"/> Yes <input type="checkbox"/> No		PO # 4502081030		W# #		Projec. # 50018578		SSC/W#		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 - Trizma Z - other (specify)					
Phone 262-781-0475(Tel)		Email mitche-d@kprginc.com		500-221621 COC		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		2540C, 4500_F_C, SM4500_CL_E, SM4500_SO4_E		903.0 - Radium 226		904.0 - Radium 228		Ra226Ra228_GFPC Rad Combined		6010C, 6020A, 7470A		Total Number of Containers	
<b>Sample Identification</b>		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											
6 MW-20		9/1/22		1015		G		Water		N N X X X X X											
								Water													
								Water													
								Water													
								Water													
								Water													
<b>Possible Hazard Identification</b>		<input checked="" type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Poison B		<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological		<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>		<input type="checkbox"/> Return To Client		<input checked="" type="checkbox"/> Disposal By Lab		<input type="checkbox"/> Archive For _____ Months	
Deliverable Requested I II III IV Other (specify)														Special Instructions/QC Requirements							
Empty Kit Reinquished by		Date		Time		Method of Shipment:															
Reinquished by <b>Kaelyn Spene</b>		Date/Time <b>9/1/22/1400</b>		Company <b>KPRG</b>		Received by <b>FedEx</b>		Date/Time <b>9/1/22/1400</b>		Company <b>FedEx</b>											
Reinquished by		Date/Time		Company		Received by <b>Shane Root</b>		Date/Time <b>9/1/22 1000</b>		Company <b>ERTH</b>											
Reinquished by		Date/Time		Company		Received by		Date/Time		Company											
Custody Seals Intact. <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Sea No																			
																				Cooler Temperature(s) and Other Remarks <b>125 → 123</b>	





# Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-221621-1

**Login Number: 221621**

**List Number: 1**

**Creator: Hernandez, Stephanie**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	True	14.0,12.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Lab Chronicle

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

Job ID: 500-221621-1

**Client Sample ID: MW-15**  
**Date Collected: 08/31/22 12:31**  
**Date Received: 09/01/22 09:30**

**Lab Sample ID: 500-221621-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	673884	FXG	EET CHI	09/08/22 22:26
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		5	674091	FXG	EET CHI	09/09/22 17:23
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	674440	FXG	EET CHI	09/13/22 12:48
Total/NA	Prep	7470A			674142	MJG	EET CHI	09/12/22 10:20 - 09/12/22 12:20 <sup>1</sup>
Total/NA	Analysis	7470A		1	674381	MJG	EET CHI	09/13/22 09:16
Total/NA	Analysis	SM 2540C		1	673534	SMO	EET CHI	09/07/22 17:16
Total/NA	Analysis	SM 4500 Cl- E		10	673960	LP	EET CHI	09/09/22 17:31
Total/NA	Analysis	SM 4500 F C		1	674042	EAT	EET CHI	09/10/22 15:01
Total/NA	Analysis	SM 4500 SO4 E		50	673965	LP	EET CHI	09/09/22 19:21

**Client Sample ID: MW-14**  
**Date Collected: 08/31/22 16:13**  
**Date Received: 09/01/22 09:30**

**Lab Sample ID: 500-221621-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	673884	FXG	EET CHI	09/08/22 22:29
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		5	674091	FXG	EET CHI	09/09/22 17:26
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	674440	FXG	EET CHI	09/13/22 12:51
Total/NA	Prep	7470A			674142	MJG	EET CHI	09/12/22 10:20 - 09/12/22 12:20 <sup>1</sup>
Total/NA	Analysis	7470A		1	674381	MJG	EET CHI	09/13/22 09:25
Total/NA	Analysis	SM 2540C		1	673534	SMO	EET CHI	09/07/22 17:16
Total/NA	Analysis	SM 4500 Cl- E		10	673960	LP	EET CHI	09/09/22 17:31
Total/NA	Analysis	SM 4500 F C		1	674042	EAT	EET CHI	09/10/22 15:04
Total/NA	Analysis	SM 4500 SO4 E		50	673965	LP	EET CHI	09/09/22 19:22

**Client Sample ID: MW-17**  
**Date Collected: 08/31/22 14:04**  
**Date Received: 09/01/22 09:30**

**Lab Sample ID: 500-221621-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	673884	FXG	EET CHI	09/08/22 22:33
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	674091	FXG	EET CHI	09/09/22 17:36
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	674440	FXG	EET CHI	09/13/22 12:55
Total/NA	Prep	7470A			674142	MJG	EET CHI	09/12/22 10:20 - 09/12/22 12:20 <sup>1</sup>
Total/NA	Analysis	7470A		1	674381	MJG	EET CHI	09/13/22 09:27

Eurofins Chicago

# Lab Chronicle

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

Job ID: 500-221621-1

**Client Sample ID: MW-17**

**Date Collected: 08/31/22 14:04**

**Date Received: 09/01/22 09:30**

**Lab Sample ID: 500-221621-3**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	673534	SMO	EET CHI	09/07/22 17:16
Total/NA	Analysis	SM 4500 CI- E		10	673960	LP	EET CHI	09/09/22 17:48
Total/NA	Analysis	SM 4500 F C		1	674042	EAT	EET CHI	09/10/22 15:06
Total/NA	Analysis	SM 4500 SO4 E		50	673965	LP	EET CHI	09/09/22 19:22

**Client Sample ID: Duplicate**

**Date Collected: 08/31/22 00:00**

**Date Received: 09/01/22 09:30**

**Lab Sample ID: 500-221621-4**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	673884	FXG	EET CHI	09/08/22 22:36
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		5	674091	FXG	EET CHI	09/09/22 17:40
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	674440	FXG	EET CHI	09/13/22 12:58
Total/NA	Prep	7470A			674142	MJG	EET CHI	09/12/22 10:20 - 09/12/22 12:20 <sup>1</sup>
Total/NA	Analysis	7470A		1	674381	MJG	EET CHI	09/13/22 09:29
Total/NA	Analysis	SM 2540C		1	673534	SMO	EET CHI	09/07/22 17:16
Total/NA	Analysis	SM 4500 CI- E		10	673960	LP	EET CHI	09/09/22 17:49
Total/NA	Analysis	SM 4500 F C		1	674042	EAT	EET CHI	09/10/22 15:09
Total/NA	Analysis	SM 4500 SO4 E		50	673965	LP	EET CHI	09/09/22 19:22

**Client Sample ID: MW-13**

**Date Collected: 08/31/22 15:08**

**Date Received: 09/01/22 09:30**

**Lab Sample ID: 500-221621-5**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	673884	FXG	EET CHI	09/08/22 22:46
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		5	674091	FXG	EET CHI	09/09/22 17:43
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	674440	FXG	EET CHI	09/13/22 13:01
Total/NA	Prep	7470A			674142	MJG	EET CHI	09/12/22 10:20 - 09/12/22 12:20 <sup>1</sup>
Total/NA	Analysis	7470A		1	674381	MJG	EET CHI	09/13/22 09:35
Total/NA	Analysis	SM 2540C		1	673534	SMO	EET CHI	09/07/22 17:16
Total/NA	Analysis	SM 4500 CI- E		10	673960	LP	EET CHI	09/09/22 17:49
Total/NA	Analysis	SM 4500 F C		1	674042	EAT	EET CHI	09/10/22 15:11
Total/NA	Analysis	SM 4500 SO4 E		100	673965	LP	EET CHI	09/09/22 19:23

# Lab Chronicle

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

Job ID: 500-221621-1

**Client Sample ID: MW-20**

**Lab Sample ID: 500-221621-6**

**Date Collected: 09/01/22 10:15**

**Matrix: Water**

**Date Received: 09/02/22 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	673884	FXG	EET CHI	09/08/22 22:50
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		5	674091	FXG	EET CHI	09/09/22 17:47
Total Recoverable	Prep	3005A			673175	BDE	EET CHI	09/06/22 08:22 - 09/06/22 08:52 <sup>1</sup>
Total Recoverable	Analysis	6020A		1	674440	FXG	EET CHI	09/13/22 13:05
Total/NA	Prep	7470A			674142	MJG	EET CHI	09/12/22 10:20 - 09/12/22 12:20 <sup>1</sup>
Total/NA	Analysis	7470A		1	674381	MJG	EET CHI	09/13/22 09:37
Total/NA	Analysis	SM 4500 Cl- E		10	673960	LP	EET CHI	09/09/22 17:49
Total/NA	Analysis	SM 4500 SO4 E		50	673965	LP	EET CHI	09/09/22 19:38

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

**Laboratory References:**

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



# Accreditation/Certification Summary

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

Job ID: 500-221621-1

## Laboratory: Eurofins Chicago

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

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

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

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-221621-2  
Client Project/Site: Powerton CCR MCB (RAD)

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

Attn: Richard Gnat



Authorized for release by:  
9/30/2022 8:33:03 AM

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

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Method Summary . . . . .	4
Sample Summary . . . . .	5
Client Sample Results . . . . .	6
Definitions . . . . .	10
QC Association . . . . .	11
QC Sample Results . . . . .	12
Chain of Custody . . . . .	13
Receipt Checklists . . . . .	18
Chronicle . . . . .	21
Certification Summary . . . . .	23
Tracer Carrier Summary . . . . .	24



# Case Narrative

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

Job ID: 500-221621-2

---

## Job ID: 500-221621-2

---

### Laboratory: Eurofins Chicago

#### Narrative

---

#### Job Narrative 500-221621-2

#### Comments

No additional comments.

#### Receipt

The samples were received on 9/1/2022 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 12.3° C and 14.0° C.

#### Receipt Exceptions

The following sample(s) was received at the laboratory outside the required temperature criteria: Samples #1-5 for TDS, Chloride, Fluoride and Sulfate. No ice in cooler just water. Receiving cooler temp 14.0° C .

#### RAD

Methods 903.0, 9315: Radium-226 batch 581076

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 (500-221621-1), MW-14 (500-221621-2), MW-17 (500-221621-3), Duplicate (500-221621-4), MW-13 (500-221621-5), MW-20 (500-221621-6), (LCS 160-581076/2-A), (MB 160-581076/1-A), (500-221498-K-14-A) and (500-221498-L-14-D DU)

Methods 904.0, 9320: Radium-228 batch 583206

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 (500-221621-1), MW-14 (500-221621-2), MW-17 (500-221621-3), Duplicate (500-221621-4), MW-13 (500-221621-5), MW-20 (500-221621-6), (LCS 160-583206/2-A), (MB 160-583206/1-A), (500-221498-J-14-A) and (500-221498-J-14-B DU)

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

# Method Summary

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

Job ID: 500-221621-2

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: 500-221621-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-221621-1	MW-15	Water	08/31/22 12:31	09/01/22 09:30
500-221621-2	MW-14	Water	08/31/22 16:13	09/01/22 09:30
500-221621-3	MW-17	Water	08/31/22 14:04	09/01/22 09:30
500-221621-4	Duplicate	Water	08/31/22 00:00	09/01/22 09:30
500-221621-5	MW-13	Water	08/31/22 15:08	09/01/22 09:30
500-221621-6	MW-20	Water	09/01/22 10:15	09/02/22 10:00

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

# Client Sample Results

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

Job ID: 500-221621-2

**Client Sample ID: MW-15**

**Lab Sample ID: 500-221621-1**

Date Collected: 08/31/22 12:31

Matrix: Water

Date Received: 09/01/22 09:30

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.130		0.0891	0.0899	1.00	0.125	pCi/L	09/07/22 12:48	09/29/22 08:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.6		40 - 110					09/07/22 12:48	09/29/22 08:09	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.513	U	0.330	0.332	1.00	0.513	pCi/L	09/22/22 15:49	09/29/22 12:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.8		40 - 110					09/22/22 15:49	09/29/22 12:12	1
Y Carrier	85.2		40 - 110					09/22/22 15:49	09/29/22 12:12	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.548		0.342	0.344	5.00	0.513	pCi/L		09/29/22 18:28	1

**Client Sample ID: MW-14**

**Lab Sample ID: 500-221621-2**

Date Collected: 08/31/22 16:13

Matrix: Water

Date Received: 09/01/22 09:30

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.182		0.114	0.115	1.00	0.157	pCi/L	09/07/22 12:48	09/29/22 08:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.0		40 - 110					09/07/22 12:48	09/29/22 08:09	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.561		0.349	0.353	1.00	0.517	pCi/L	09/22/22 15:49	09/29/22 12:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					09/22/22 15:49	09/29/22 12:11	1
Y Carrier	87.5		40 - 110					09/22/22 15:49	09/29/22 12:11	1

# Client Sample Results

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

Job ID: 500-221621-2

**Client Sample ID: MW-14**  
Date Collected: 08/31/22 16:13  
Date Received: 09/01/22 09:30

**Lab Sample ID: 500-221621-2**  
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.743		0.367	0.371	5.00	0.517	pCi/L		09/29/22 18:28	1

**Client Sample ID: MW-17**  
Date Collected: 08/31/22 14:04  
Date Received: 09/01/22 09:30

**Lab Sample ID: 500-221621-3**  
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	<0.134	U	0.0864	0.0869	1.00	0.134	pCi/L	09/07/22 12:48	09/29/22 08:09	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	92.3		40 - 110					09/07/22 12:48	09/29/22 08:09	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.613		0.357	0.362	1.00	0.525	pCi/L	09/22/22 15:49	09/29/22 12:12	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	98.3		40 - 110					09/22/22 15:49	09/29/22 12:12	1
Y Carrier	86.4		40 - 110					09/22/22 15:49	09/29/22 12:12	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.708		0.367	0.372	5.00	0.525	pCi/L		09/29/22 18:28	1

**Client Sample ID: Duplicate**  
Date Collected: 08/31/22 00:00  
Date Received: 09/01/22 09:30

**Lab Sample ID: 500-221621-4**  
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	<0.133	U	0.0774	0.0775	1.00	0.133	pCi/L	09/07/22 12:48	09/29/22 08:09	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	90.9		40 - 110					09/07/22 12:48	09/29/22 08:09	1

# Client Sample Results

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

Job ID: 500-221621-2

## Client Sample ID: Duplicate

Lab Sample ID: 500-221621-4

Date Collected: 08/31/22 00:00

Matrix: Water

Date Received: 09/01/22 09:30

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.705		0.364	0.369	1.00	0.515	pCi/L	09/22/22 15:49	09/29/22 12:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					09/22/22 15:49	09/29/22 12:12	1
Y Carrier	88.2		40 - 110					09/22/22 15:49	09/29/22 12:12	1

### Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.755		0.372	0.377	5.00	0.515	pCi/L		09/29/22 18:28	1

## Client Sample ID: MW-13

Lab Sample ID: 500-221621-5

Date Collected: 08/31/22 15:08

Matrix: Water

Date Received: 09/01/22 09:30

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.224		0.0952	0.0973	1.00	0.0978	pCi/L	09/07/22 12:48	09/29/22 08:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					09/07/22 12:48	09/29/22 08:09	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.595		0.312	0.316	1.00	0.436	pCi/L	09/22/22 15:49	09/29/22 12:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					09/22/22 15:49	09/29/22 12:12	1
Y Carrier	87.5		40 - 110					09/22/22 15:49	09/29/22 12:12	1

### Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.819		0.326	0.331	5.00	0.436	pCi/L		09/29/22 18:28	1

# Client Sample Results

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

Job ID: 500-221621-2

**Client Sample ID: MW-20**  
**Date Collected: 09/01/22 10:15**  
**Date Received: 09/02/22 10:00**

**Lab Sample ID: 500-221621-6**  
**Matrix: Water**

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.180		0.0927	0.0941	1.00	0.112	pCi/L	09/07/22 12:48	09/29/22 08:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					09/07/22 12:48	09/29/22 08:09	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.441	U	0.294	0.297	1.00	0.441	pCi/L	09/22/22 15:49	09/29/22 12:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					09/22/22 15:49	09/29/22 12:12	1
Y Carrier	87.1		40 - 110					09/22/22 15:49	09/29/22 12:12	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.596		0.308	0.312	5.00	0.441	pCi/L		09/29/22 18:28	1

# Definitions/Glossary

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

Job ID: 500-221621-2

## 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: 500-221621-2

## Rad

### Prep Batch: 581076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221621-1	MW-15	Total/NA	Water	PrecSep-21	
500-221621-2	MW-14	Total/NA	Water	PrecSep-21	
500-221621-3	MW-17	Total/NA	Water	PrecSep-21	
500-221621-4	Duplicate	Total/NA	Water	PrecSep-21	
500-221621-5	MW-13	Total/NA	Water	PrecSep-21	
500-221621-6	MW-20	Total/NA	Water	PrecSep-21	
MB 160-581076/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-581076/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

### Prep Batch: 583206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221621-1	MW-15	Total/NA	Water	PrecSep_0	
500-221621-2	MW-14	Total/NA	Water	PrecSep_0	
500-221621-3	MW-17	Total/NA	Water	PrecSep_0	
500-221621-4	Duplicate	Total/NA	Water	PrecSep_0	
500-221621-5	MW-13	Total/NA	Water	PrecSep_0	
500-221621-6	MW-20	Total/NA	Water	PrecSep_0	
MB 160-583206/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-583206/2-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: 500-221621-2

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

**Lab Sample ID: MB 160-581076/1-A**  
**Matrix: Water**  
**Analysis Batch: 583994**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 581076**

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	<0.0908	U	0.0644	0.0648	1.00	0.0908	pCi/L	09/07/22 12:48	09/29/22 08:01	1
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed	
Ba Carrier	95.6		40 - 110				09/07/22 12:48		09/29/22 08:01	

**Lab Sample ID: LCS 160-581076/2-A**  
**Matrix: Water**  
**Analysis Batch: 583994**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 581076**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	9.890		1.04	1.00	0.0923	pCi/L	87	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	95.3		40 - 110						

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

**Lab Sample ID: MB 160-583206/1-A**  
**Matrix: Water**  
**Analysis Batch: 584007**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 583206**

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.8641		0.401	0.409	1.00	0.531	pCi/L	09/22/22 15:49	09/29/22 12:04	1
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed	
Ba Carrier	80.0		40 - 110				09/22/22 15:49		09/29/22 12:04	
Y Carrier	83.4		40 - 110				09/22/22 15:49		09/29/22 12:04	

**Lab Sample ID: LCS 160-583206/2-A**  
**Matrix: Water**  
**Analysis Batch: 584007**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 583206**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	8.24	8.492		1.15	1.00	0.472	pCi/L	103	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	94.8		40 - 110						
Y Carrier	85.6		40 - 110						













# Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-221621-2

**Login Number: 221621**

**List Number: 1**

**Creator: Hernandez, Stephanie**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	True	14.0,12.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-221621-2

**Login Number: 221621**

**List Number: 2**

**Creator: Booker, Autumn R**

**List Source: Eurofins St. Louis**

**List Creation: 09/02/22 11:56 AM**

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



# Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-221621-2

**Login Number: 221621**

**List Number: 3**

**Creator: Booker, Autumn R**

**List Source: Eurofins St. Louis**

**List Creation: 09/06/22 11:59 AM**

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

# Lab Chronicle

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

Job ID: 500-221621-2

**Client Sample ID: MW-15**  
**Date Collected: 08/31/22 12:31**  
**Date Received: 09/01/22 09:30**

**Lab Sample ID: 500-221621-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			581076	TJ	EET SL	09/07/22 12:48
Total/NA	Analysis	903.0		1	584004	FLC	EET SL	09/29/22 08:09
Total/NA	Prep	PrecSep_0			583206	ASG	EET SL	09/22/22 15:49
Total/NA	Analysis	904.0		1	583994	FLC	EET SL	09/29/22 12:12
Total/NA	Analysis	Ra226_Ra228		1	584089	CLP	EET SL	09/29/22 18:28

**Client Sample ID: MW-14**  
**Date Collected: 08/31/22 16:13**  
**Date Received: 09/01/22 09:30**

**Lab Sample ID: 500-221621-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			581076	TJ	EET SL	09/07/22 12:48
Total/NA	Analysis	903.0		1	584004	FLC	EET SL	09/29/22 08:09
Total/NA	Prep	PrecSep_0			583206	ASG	EET SL	09/22/22 15:49
Total/NA	Analysis	904.0		1	583994	FLC	EET SL	09/29/22 12:11
Total/NA	Analysis	Ra226_Ra228		1	584089	CLP	EET SL	09/29/22 18:28

**Client Sample ID: MW-17**  
**Date Collected: 08/31/22 14:04**  
**Date Received: 09/01/22 09:30**

**Lab Sample ID: 500-221621-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			581076	TJ	EET SL	09/07/22 12:48
Total/NA	Analysis	903.0		1	584004	FLC	EET SL	09/29/22 08:09
Total/NA	Prep	PrecSep_0			583206	ASG	EET SL	09/22/22 15:49
Total/NA	Analysis	904.0		1	583994	FLC	EET SL	09/29/22 12:12
Total/NA	Analysis	Ra226_Ra228		1	584089	CLP	EET SL	09/29/22 18:28

**Client Sample ID: Duplicate**  
**Date Collected: 08/31/22 00:00**  
**Date Received: 09/01/22 09:30**

**Lab Sample ID: 500-221621-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			581076	TJ	EET SL	09/07/22 12:48
Total/NA	Analysis	903.0		1	584004	FLC	EET SL	09/29/22 08:09
Total/NA	Prep	PrecSep_0			583206	ASG	EET SL	09/22/22 15:49
Total/NA	Analysis	904.0		1	583994	FLC	EET SL	09/29/22 12:12
Total/NA	Analysis	Ra226_Ra228		1	584089	CLP	EET SL	09/29/22 18:28

# Lab Chronicle

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

Job ID: 500-221621-2

## Client Sample ID: MW-13

Date Collected: 08/31/22 15:08

Date Received: 09/01/22 09:30

## Lab Sample ID: 500-221621-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			581076	TJ	EET SL	09/07/22 12:48
Total/NA	Analysis	903.0		1	584004	FLC	EET SL	09/29/22 08:09
Total/NA	Prep	PrecSep_0			583206	ASG	EET SL	09/22/22 15:49
Total/NA	Analysis	904.0		1	583994	FLC	EET SL	09/29/22 12:12
Total/NA	Analysis	Ra226_Ra228		1	584089	CLP	EET SL	09/29/22 18:28

## Client Sample ID: MW-20

Date Collected: 09/01/22 10:15

Date Received: 09/02/22 10:00

## Lab Sample ID: 500-221621-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			581076	TJ	EET SL	09/07/22 12:48
Total/NA	Analysis	903.0		1	584004	FLC	EET SL	09/29/22 08:09
Total/NA	Prep	PrecSep_0			583206	ASG	EET SL	09/22/22 15:49
Total/NA	Analysis	904.0		1	583994	FLC	EET SL	09/29/22 12:12
Total/NA	Analysis	Ra226_Ra228		1	584089	CLP	EET SL	09/29/22 18:28

### 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: 500-221621-2

## Laboratory: Eurofins St. Louis

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

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

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

# Tracer/Carrier Summary

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

Job ID: 500-221621-2

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

Matrix: Water

Prep Type: Total/NA

### Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (40-110)
500-221621-1	MW-15	91.6
500-221621-2	MW-14	76.0
500-221621-3	MW-17	92.3
500-221621-4	Duplicate	90.9
500-221621-5	MW-13	90.9
500-221621-6	MW-20	90.9
LCS 160-581076/2-A	Lab Control Sample	95.3
MB 160-581076/1-A	Method Blank	95.6

#### Tracer/Carrier Legend

Ba = Ba Carrier

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

Matrix: Water

Prep Type: Total/NA

### Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (40-110)	Y (40-110)
500-221621-1	MW-15	97.8	85.2
500-221621-2	MW-14	94.3	87.5
500-221621-3	MW-17	98.3	86.4
500-221621-4	Duplicate	94.3	88.2
500-221621-5	MW-13	102	87.5
500-221621-6	MW-20	95.3	87.1
LCS 160-583206/2-A	Lab Control Sample	94.8	85.6
MB 160-583206/1-A	Method Blank	80.0	83.4

#### Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-221621-3

Client Project/Site: Powerton CCR MCB MW-20 TDS/Fluoride)

For:

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

Attn: Richard Gnat



Authorized for release by:  
10/12/2022 4:37:50 PM

Diana Mockler, Project Manager I  
(219)252-7570

[Diana.Mockler@et.eurofinsus.com](mailto:Diana.Mockler@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Method Summary . . . . .	4
Sample Summary . . . . .	5
Client Sample Results . . . . .	6
Definitions . . . . .	7
QC Association . . . . .	8
QC Sample Results . . . . .	9
Chain of Custody . . . . .	10
Receipt Checklists . . . . .	11
Chronicle . . . . .	12
Certification Summary . . . . .	13





# Case Narrative

Client: KPRG and Associates, Inc.  
Project/Site: Powerton CCR MCB MW-20 TDS/Fluoride)

Job ID: 500-221621-3

---

## Job ID: 500-221621-3

---

### Laboratory: Eurofins Chicago

#### Narrative

---

#### Job Narrative 500-221621-3

#### Comments

No additional comments.

#### Receipt

The samples were received on 9/1/2022 9:30 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 -1.1° C, 12.3° C and 14.0° C.

#### Receipt Exceptions

The following sample(s) was received at the laboratory outside the required temperature criteria: Samples #1-5 for TDS, Chloride, Fluoride and Sulfate. No ice in cooler just water. Receiving cooler temp 14.0°C

#### General Chemistry

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

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

# Method Summary

Client: KPRG and Associates, Inc.  
Project/Site: Powerton CCR MCB MW-20 TDS/Fluoride)

Job ID: 500-221621-3

Method	Method Description	Protocol	Laboratory
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CHI
SM 4500 F C	Fluoride	SM	EET CHI

**Protocol References:**

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

**Laboratory References:**

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

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

# Sample Summary

Client: KPRG and Associates, Inc.  
Project/Site: Powerton CCR MCB MW-20 TDS/Fluoride)

Job ID: 500-221621-3

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-221621-7	MW-20	Water	09/29/22 08:00	09/30/22 09:15

1

2

3

4

5

6

7

8

9

10

11

12

13

# Client Sample Results

Client: KPRG and Associates, Inc.  
Project/Site: Powerton CCR MCB MW-20 TDS/Fluoride)

Job ID: 500-221621-3

**Client Sample ID: MW-20**  
**Date Collected: 09/29/22 08:00**  
**Date Received: 09/30/22 09:15**

**Lab Sample ID: 500-221621-7**  
**Matrix: Water**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	2100		10		mg/L			09/30/22 14:08	1
Fluoride (SM 4500 F C)	0.15		0.10		mg/L			10/01/22 12:10	1

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

# Definitions/Glossary

Client: KPRG and Associates, Inc.  
Project/Site: Powerton CCR MCB MW-20 TDS/Fluoride)

Job ID: 500-221621-3

## 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 MW-20 TDS/Fluoride)

Job ID: 500-221621-3

## General Chemistry

### Analysis Batch: 677333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221621-7	MW-20	Total/NA	Water	SM 2540C	
MB 500-677333/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-677333/2	Lab Control Sample	Total/NA	Water	SM 2540C	

### Analysis Batch: 677387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221621-7	MW-20	Total/NA	Water	SM 4500 F C	
MB 500-677387/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-677387/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

- 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 MW-20 TDS/Fluoride)

Job ID: 500-221621-3

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

Lab Sample ID: MB 500-677333/1  
 Matrix: Water  
 Analysis Batch: 677333

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			09/30/22 14:08	1

Lab Sample ID: LCS 500-677333/2  
 Matrix: Water  
 Analysis Batch: 677333

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	240		mg/L		96	80 - 120

## Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-677387/3  
 Matrix: Water  
 Analysis Batch: 677387

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			10/01/22 10:53	1

Lab Sample ID: LCS 500-677387/4  
 Matrix: Water  
 Analysis Batch: 677387

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	10.2		mg/L		102	90 - 119





# Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-221621-3

**Login Number: 221621**

**List Source: Eurofins Chicago**

**List Number: 1**

**Creator: Hernandez, Stephanie**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	True	14.0,12.3,-1.1 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 MW-20 TDS/Fluoride)

Job ID: 500-221621-3

**Client Sample ID: MW-20**  
**Date Collected: 09/29/22 08:00**  
**Date Received: 09/30/22 09:15**

**Lab Sample ID: 500-221621-7**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	677333	SMO	EET CHI	09/30/22 14:08
Total/NA	Analysis	SM 4500 F C		1	677387	EAT	EET CHI	10/01/22 12:10

**Laboratory References:**

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

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

# Accreditation/Certification Summary

Client: KPRG and Associates, Inc.  
Project/Site: Powerton CCR MCB MW-20 TDS/Fluoride)

Job ID: 500-221621-3

## Laboratory: Eurofins Chicago

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

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

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

PROJECT NAME	NRG - POWERTON STATION (12313.1)		DATE	8/31/22
Sample Name	MW-13	Start Time	1455	
Condition of Well	good			
Water Level	32.01	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow	Purge Characteristics	clear	
Volume Removed	4.5 gts	WL at Sample Time	33.51	
Method of Sample	Low-Flow	Sample Characteristics	clear	
Sample Analysis	CCA & MCB CCR	Sample Time	1508	
Water Quality Meter	YSI ProDss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
1458	32.01	7.58	17.7	2.160	6.96	136.5	22.63
1501	-	7.60	15.6	2.729	2.22	106.2	46.12
1504	-	7.63	15.5	2.720	1.12	21.8	23.81
1507	33.51	7.64	15.4	2.709	0.77	-53.8	16.22

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

KLS

PROJECT NAME	NRG - POWERTON STATION (12313.1)		DATE	8/31/22
Sample Name	MW-14	Start Time	1600	
Condition of Well	good			
Water Level	28.50	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow	Purge Characteristics	cloudy, orange	
Volume Removed	4.5 gts	WL at Sample Time	32.10	
Method of Sample	Low-Flow	Sample Characteristics	sl. cloudy	
Sample Analysis	CCA, MCB CCR	Sample Time	1613	
Water Quality Meter	YSI ProDss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
1603	28.50	7.01	17.3	2.630	5.27	131.6	142.10
1606	-	6.79	16.3	2.399	2.73	137.8	493.00
1609	-	6.75	16.0	2.394	1.90	139.5	75.96
1612	32.10	6.74	16.0	2.406	1.69	140.3	40.75

SAMPLING NOTES: 8/31/22 - well starts to go dry, stopped at 1502 to resume CCA sampling in the morning

Sampler Name and Company:

KPRG and Associates

KLS

PROJECT NAME	NRG - POWERTON STATION (12313.1)		DATE	8/31/22
Sample Name	MW-15	Start Time	1220	
Condition of Well	good			
Water Level	25.44	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow	Purge Characteristics	cloudy, brown	
Volume Removed	4 gts	WL at Sample Time	25.44	
Method of Sample	Low-Flow	Sample Characteristics	sl. cloudy	
Sample Analysis	CCA, MCB + ABB/ASB CCR	Sample Time	1231	
Water Quality Meter	YSI ProDss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
1221	25.44	7.05	17.7	3.376	7.37	131.5	16.90
1224	-	6.84	16.9	2.700	2.34	114.7	255.14
1227	-	6.81	16.5	2.667	1.13	82.8	73.76
1230	25.44	6.80	16.4	2.669	0.83	50.1	28.70

SAMPLING NOTES:

MCB duplicate

Sampler Name and Company:

KPRG and Associates

KLS

PROJECT NAME	NRG - POWERTON STATION (12313.1)		DATE	8/31/22
Sample Name	MW-17	Start Time	1353	
Condition of Well	good			
Water Level	25.95	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow	Purge Characteristics	sl. cloudy	
Volume Removed	4 gts	WL at Sample Time	25.95	
Method of Sample	Low-Flow	Sample Characteristics	clear	
Sample Analysis	MCB & ABB/ASB CCR	Sample Time	1404	
Water Quality Meter	YSI ProDss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
1355	25.95	7.25	17.8	2.503	5.82	137.7	73.56
1358	-	7.12	16.5	1.834	4.18	136.4	95.00
1401	-	7.10	16.1	1.809	4.83	136.7	34.38
1403	25.95	7.12	16.0	1.812	5.25	136.7	22.58

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

ALS

PROJECT NAME	NRG - POWERTON STATION (12313.1)		DATE	9/1/22
Sample Name	MW-20	Start Time	1001	
Condition of Well	good			
Water Level	31.22	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low-Flow	Purge Characteristics	clear	
Volume Removed	0.5 gts	WL at Sample Time	31.22	
Method of Sample	Low-Flow	Sample Characteristics	clear	
Sample Analysis	MCB CCR	Sample Time	1015	
Water Quality Meter	YSI ProDss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
1005	31.22	6.01	21.4	2.232	6.48	201.4	12.01
1008	-	6.24	20.7	2.203	5.55	199.1	23.66
1011	-	6.27	20.1	2.161	4.25	195.8	36.88
1014	31.22	6.28	19.9	2.106	2.85	193.3	63.50

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

KLS



