

DATA SUMMARY POSTING

Station: Midwest Generation Powerton Generating Station

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

In accordance with the new Ill. Adm. Code Title 35, Part 845: Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments (State CCR Rule) groundwater monitoring was completed during the 2nd quarter 2023 which includes the entire list of parameters specified under Section 845.600(a)(1) and (b). Table 1 is a summary table of all available CCR monitoring data to date including any data generated previously as part of the Federal CCR Rule monitoring. In addition, Table 2 provides a summary of turbidity data which was collected as part of State CCR Rule requirements which is a data parameter that was not required under the Federal CCR Rule.

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

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

Well	Date	Turbidity (NTU)
MW-01	2/23/2021	78.20
	4/9/2021	6.96
	5/10/2021	3.24
	6/2/2021	3.80
	6/28/2021	4.30
	7/19/2021	4.88
	8/24/2021	3.34
	9/30/2021	3.04
	11/30/2021	5.43
	2/9/2022	11.5
	6/7/2022	3.63
	8/30/2022	4.73
	11/15/2022	3.9
2/22/2023	4.54	
5/17/2023	4.33	
MW-10	2/23/2021	257.70
	4/9/2021	54.91
	5/11/2021	24.74
	6/2/2021	6.02
	6/28/2021	14.11
	7/19/2021	17.53
	8/24/2021	41.55
	9/30/2021	17.07
	11/30/2021	11.92
	2/9/2022	224.6
	6/7/2022	7.88
	8/30/2022	13.34
	11/15/2022	23.18
2/22/2023	14.31	
5/17/2023	30.70	
MW-02	2/22/2021	19.60
	4/8/2021	4.55
	5/11/2021	1.82
	6/2/2021	2.06
	6/28/2021	2.67
	7/19/2021	3.56
	8/24/2021	5.23
	10/1/2021	2.76
	11/30/2021	0.0
	2/8/2022	0.0
	6/7/2022	2.03
	8/30/2022	2.46
	11/14/2022	29.35
2/21/2023	2.63	
5/16/2023	62.49	
MW-03	2/22/2021	8.20
	4/8/2021	4.00
	5/11/2021	2.68
	6/2/2021	3.63
	6/28/2021	3.32
	7/19/2021	4.22
	8/24/2021	5.75
	10/1/2021	2.45
	11/30/2021	0.0
	2/8/2022	0.0
	6/7/2022	1.72
	8/30/2022	2.67
	11/14/2022	4.03
2/21/2023	2.33	
5/16/2023	6.94	
MW-04	2/22/2021	4.20
	4/8/2021	4.05
	5/11/2021	4.33
	6/2/2021	2.12
	6/28/2021	8.21
	7/19/2021	3.84
	8/24/2021	2.92
	10/1/2021	2.72
	11/30/2021	0.0
	2/8/2022	11.09
	6/7/2022	1.62
	8/30/2022	4.05
	11/14/2022	20.70
2/21/2023	3.70	
5/16/2023	2.50	

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

MW-05	2/22/2021	1.72
	4/8/2021	4.00
	5/11/2021	1.82
	6/2/2021	1.88
	6/28/2021	3.49
	7/19/2021	8.39
	8/24/2021	3.20
	10/1/2021	3.12
	11/30/2021	0.0
	2/8/2022	0.0
	6/7/2022	2.33
	8/30/2022	2.70
	11/14/2022	2.05
	2/21/2023	2.16
5/16/2023	2.55	

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

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JOB DESCRIPTION

Powerton CCR FAB

JOB NUMBER

500-233911-1

Eurofins Chicago

Job Notes

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

Authorization



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Case Narrative

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

Job ID: 500-233911-1

Job ID: 500-233911-1

Laboratory: Eurofins Chicago

Narrative

**Job Narrative
500-233911-1**

Receipt

The samples were received on 5/17/2023 10:00 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 0.1° C and 4.5° C.

Metals

Method 6020A: The low level and continuing calibration verification (CCVL, CCV) associated with batch 500-715021 recovered above the upper control limit for Beryllium. The 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

For sample 500-233911-6 (MW-01), the plastic 1 liter unpreserved container was consumed during the TDS analysis, therefore, Chloride, Fluoride and Sulfate could not be analyzed. Per the client, they will re-sample for these parameters in mid-June

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



Method Summary

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

Job ID: 500-233911-1

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

Protocol References:

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

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

Laboratory References:

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

Sample Summary

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

Job ID: 500-233911-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-233911-1	MW-02	Water	05/16/23 09:06	05/17/23 10:00
500-233911-2	MW-03	Water	05/16/23 09:54	05/17/23 10:00
500-233911-3	MW-04	Water	05/16/23 10:48	05/17/23 10:00
500-233911-4	MW-05	Water	05/16/23 11:45	05/17/23 10:00
500-233911-5	MW-10	Water	05/17/23 09:08	05/18/23 09:40
500-233911-6	MW-01	Water	05/17/23 12:36	05/18/23 09:40
500-233911-7	Duplicate	Water	05/17/23 00:00	05/18/23 09:40

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

Client Sample Results

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

Job ID: 500-233911-1

Client Sample ID: MW-02
Date Collected: 05/16/23 09:06
Date Received: 05/17/23 10:00

Lab Sample ID: 500-233911-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/22/23 09:04	05/24/23 21:43	1
Arsenic	0.0011		0.0010		mg/L		05/22/23 09:04	05/23/23 23:53	1
Barium	0.065		0.0025		mg/L		05/22/23 09:04	05/24/23 21:43	1
Beryllium	<0.0010	^+ ^1+	0.0010		mg/L		05/22/23 09:04	05/23/23 23:53	1
Boron	0.53		0.050		mg/L		05/22/23 09:04	05/23/23 23:53	1
Cadmium	<0.00050		0.00050		mg/L		05/22/23 09:04	05/23/23 23:53	1
Calcium	83		0.20		mg/L		05/22/23 09:04	05/24/23 21:43	1
Chromium	<0.0050		0.0050		mg/L		05/22/23 09:04	05/23/23 23:53	1
Cobalt	<0.0010		0.0010		mg/L		05/22/23 09:04	05/23/23 23:53	1
Lead	<0.00050		0.00050		mg/L		05/22/23 09:04	05/23/23 23:53	1
Lithium	<0.010		0.010		mg/L		05/22/23 09:04	05/25/23 23:03	1
Molybdenum	<0.0050		0.0050		mg/L		05/22/23 09:04	05/23/23 23:53	1
Selenium	<0.0025		0.0025		mg/L		05/22/23 09:04	05/23/23 23:53	1
Thallium	<0.0020		0.0020		mg/L		05/22/23 09:04	05/23/23 23:53	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/05/23 11:05	06/06/23 10:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	400		10		mg/L			05/18/23 00:33	1
Chloride (SM 4500 Cl- E)	47		4.0		mg/L			05/24/23 16:33	2
Fluoride (SM 4500 F C)	0.15		0.10		mg/L			05/21/23 10:10	1
Sulfate (SM 4500 SO4 E)	33		25		mg/L			05/26/23 14:25	5

Client Sample Results

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

Job ID: 500-233911-1

Client Sample ID: MW-03

Lab Sample ID: 500-233911-2

Date Collected: 05/16/23 09:54

Matrix: Water

Date Received: 05/17/23 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/22/23 09:04	05/24/23 21:46	1
Arsenic	<0.0010		0.0010		mg/L		05/22/23 09:04	05/23/23 23:57	1
Barium	0.068		0.0025		mg/L		05/22/23 09:04	05/24/23 21:46	1
Beryllium	<0.0010	^+ ^1+	0.0010		mg/L		05/22/23 09:04	05/23/23 23:57	1
Boron	0.15		0.050		mg/L		05/22/23 09:04	05/23/23 23:57	1
Cadmium	<0.00050		0.00050		mg/L		05/22/23 09:04	05/23/23 23:57	1
Calcium	80		0.20		mg/L		05/22/23 09:04	05/24/23 21:46	1
Chromium	<0.0050		0.0050		mg/L		05/22/23 09:04	05/23/23 23:57	1
Cobalt	<0.0010		0.0010		mg/L		05/22/23 09:04	05/23/23 23:57	1
Lead	<0.00050		0.00050		mg/L		05/22/23 09:04	05/23/23 23:57	1
Lithium	<0.010		0.010		mg/L		05/22/23 09:04	05/25/23 23:06	1
Molybdenum	<0.0050		0.0050		mg/L		05/22/23 09:04	05/23/23 23:57	1
Selenium	0.0038		0.0025		mg/L		05/22/23 09:04	05/23/23 23:57	1
Thallium	<0.0020		0.0020		mg/L		05/22/23 09:04	05/23/23 23:57	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/05/23 11:05	06/06/23 10:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	420		10		mg/L			05/18/23 00:35	1
Chloride (SM 4500 Cl- E)	69		4.0		mg/L			05/24/23 16:34	2
Fluoride (SM 4500 F C)	0.21		0.10		mg/L			05/21/23 10:10	1
Sulfate (SM 4500 SO4 E)	31		10		mg/L			05/26/23 14:25	2

Client Sample Results

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

Job ID: 500-233911-1

Client Sample ID: MW-04

Lab Sample ID: 500-233911-3

Date Collected: 05/16/23 10:48

Matrix: Water

Date Received: 05/17/23 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/22/23 09:04	05/24/23 21:50	1
Arsenic	<0.0010		0.0010		mg/L		05/22/23 09:04	05/24/23 00:00	1
Barium	0.034		0.0025		mg/L		05/22/23 09:04	05/24/23 21:50	1
Beryllium	<0.0010	^+ ^1+	0.0010		mg/L		05/22/23 09:04	05/24/23 00:00	1
Boron	0.66		0.050		mg/L		05/22/23 09:04	05/24/23 00:00	1
Cadmium	<0.00050		0.00050		mg/L		05/22/23 09:04	05/24/23 00:00	1
Calcium	100		0.20		mg/L		05/22/23 09:04	05/24/23 21:50	1
Chromium	<0.0050		0.0050		mg/L		05/22/23 09:04	05/24/23 00:00	1
Cobalt	<0.0010		0.0010		mg/L		05/22/23 09:04	05/24/23 00:00	1
Lead	<0.00050		0.00050		mg/L		05/22/23 09:04	05/24/23 00:00	1
Lithium	<0.010		0.010		mg/L		05/22/23 09:04	05/25/23 23:10	1
Molybdenum	<0.0050		0.0050		mg/L		05/22/23 09:04	05/24/23 00:00	1
Selenium	<0.0025		0.0025		mg/L		05/22/23 09:04	05/24/23 00:00	1
Thallium	<0.0020		0.0020		mg/L		05/22/23 09:04	05/24/23 00:00	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/05/23 11:05	06/06/23 10:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	550		10		mg/L			05/18/23 00:38	1
Chloride (SM 4500 Cl- E)	51		10		mg/L			05/24/23 16:34	5
Fluoride (SM 4500 F C)	0.27		0.10		mg/L			05/21/23 10:10	1
Sulfate (SM 4500 SO4 E)	120		50		mg/L			05/26/23 14:26	10

Client Sample Results

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

Job ID: 500-233911-1

Client Sample ID: MW-05

Lab Sample ID: 500-233911-4

Date Collected: 05/16/23 11:45

Matrix: Water

Date Received: 05/17/23 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/22/23 09:04	05/24/23 21:53	1
Arsenic	<0.0010		0.0010		mg/L		05/22/23 09:04	05/24/23 00:04	1
Barium	0.053		0.0025		mg/L		05/22/23 09:04	05/24/23 21:53	1
Beryllium	<0.0010	^+ ^1+	0.0010		mg/L		05/22/23 09:04	05/24/23 00:04	1
Boron	0.78		0.050		mg/L		05/22/23 09:04	05/24/23 00:04	1
Cadmium	<0.00050		0.00050		mg/L		05/22/23 09:04	05/24/23 00:04	1
Calcium	110		0.20		mg/L		05/22/23 09:04	05/24/23 21:53	1
Chromium	<0.0050		0.0050		mg/L		05/22/23 09:04	05/24/23 00:04	1
Cobalt	<0.0010		0.0010		mg/L		05/22/23 09:04	05/24/23 00:04	1
Lead	<0.00050		0.00050		mg/L		05/22/23 09:04	05/24/23 00:04	1
Lithium	<0.010		0.010		mg/L		05/22/23 09:04	05/25/23 23:13	1
Molybdenum	<0.0050		0.0050		mg/L		05/22/23 09:04	05/24/23 00:04	1
Selenium	<0.0025		0.0025		mg/L		05/22/23 09:04	05/24/23 00:04	1
Thallium	<0.0020		0.0020		mg/L		05/22/23 09:04	05/24/23 00:04	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/05/23 11:05	06/06/23 10:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	690		10		mg/L			05/18/23 00:40	1
Chloride (SM 4500 Cl- E)	79		10		mg/L			05/24/23 16:35	5
Fluoride (SM 4500 F C)	0.30		0.10		mg/L			05/21/23 10:10	1
Sulfate (SM 4500 SO4 E)	130		25		mg/L			05/26/23 14:26	5

Client Sample Results

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

Job ID: 500-233911-1

Client Sample ID: MW-10

Lab Sample ID: 500-233911-5

Date Collected: 05/17/23 09:08

Matrix: Water

Date Received: 05/18/23 09:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/22/23 09:04	05/24/23 21:56	1
Arsenic	0.0017		0.0010		mg/L		05/22/23 09:04	05/24/23 00:07	1
Barium	0.32		0.0025		mg/L		05/22/23 09:04	05/24/23 21:56	1
Beryllium	<0.0010	^+ ^1+	0.0010		mg/L		05/22/23 09:04	05/24/23 00:07	1
Boron	1.8		0.050		mg/L		05/22/23 09:04	05/24/23 00:07	1
Cadmium	<0.00050		0.00050		mg/L		05/22/23 09:04	05/24/23 00:07	1
Calcium	130		0.20		mg/L		05/22/23 09:04	05/24/23 21:56	1
Chromium	<0.0050		0.0050		mg/L		05/22/23 09:04	05/24/23 00:07	1
Cobalt	0.012		0.0010		mg/L		05/22/23 09:04	05/24/23 00:07	1
Lead	0.0018		0.00050		mg/L		05/22/23 09:04	05/24/23 00:07	1
Lithium	<0.010		0.010		mg/L		05/22/23 09:04	05/25/23 23:16	1
Molybdenum	<0.0050		0.0050		mg/L		05/22/23 09:04	05/24/23 00:07	1
Selenium	0.0047		0.0025		mg/L		05/22/23 09:04	05/24/23 00:07	1
Thallium	<0.0020		0.0020		mg/L		05/22/23 09:04	05/24/23 00:07	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/05/23 11:05	06/06/23 10:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	610		10		mg/L			05/22/23 01:20	1
Chloride (SM 4500 Cl- E)	34		4.0		mg/L			05/24/23 16:35	2
Fluoride (SM 4500 F C)	0.25		0.10		mg/L			05/24/23 08:35	1
Sulfate (SM 4500 SO4 E)	84		10		mg/L			05/26/23 14:26	2

Client Sample Results

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

Job ID: 500-233911-1

Client Sample ID: MW-01
Date Collected: 05/17/23 12:36
Date Received: 05/18/23 09:40

Lab Sample ID: 500-233911-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/22/23 09:04	05/24/23 22:07	1
Arsenic	<0.0010		0.0010		mg/L		05/22/23 09:04	05/24/23 00:10	1
Barium	0.055		0.0025		mg/L		05/22/23 09:04	05/24/23 22:07	1
Beryllium	<0.0010	^+ ^1+	0.0010		mg/L		05/22/23 09:04	05/24/23 00:10	1
Boron	0.29		0.050		mg/L		05/22/23 09:04	05/24/23 00:10	1
Cadmium	<0.00050		0.00050		mg/L		05/22/23 09:04	05/24/23 00:10	1
Calcium	91		0.20		mg/L		05/22/23 09:04	05/24/23 22:07	1
Chromium	<0.0050		0.0050		mg/L		05/22/23 09:04	05/24/23 00:10	1
Cobalt	<0.0010		0.0010		mg/L		05/22/23 09:04	05/24/23 00:10	1
Lead	<0.00050		0.00050		mg/L		05/22/23 09:04	05/24/23 00:10	1
Lithium	<0.010		0.010		mg/L		05/22/23 09:04	05/25/23 23:20	1
Molybdenum	<0.0050		0.0050		mg/L		05/22/23 09:04	05/24/23 00:10	1
Selenium	<0.0025		0.0025		mg/L		05/22/23 09:04	05/24/23 00:10	1
Thallium	<0.0020		0.0020		mg/L		05/22/23 09:04	05/24/23 00:10	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/05/23 11:05	06/06/23 10:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	400		10		mg/L			05/22/23 01:23	1

Client Sample Results

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

Job ID: 500-233911-1

Client Sample ID: Duplicate

Lab Sample ID: 500-233911-7

Date Collected: 05/17/23 00:00

Matrix: Water

Date Received: 05/18/23 09:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/22/23 09:04	05/24/23 22:10	1
Arsenic	0.0019		0.0010		mg/L		05/22/23 09:04	05/24/23 00:21	1
Barium	0.30		0.0025		mg/L		05/22/23 09:04	05/24/23 22:10	1
Beryllium	<0.0010	^+ ^1+	0.0010		mg/L		05/22/23 09:04	05/24/23 00:21	1
Boron	1.9		0.050		mg/L		05/22/23 09:04	05/24/23 00:21	1
Cadmium	<0.00050		0.00050		mg/L		05/22/23 09:04	05/24/23 00:21	1
Calcium	130		0.20		mg/L		05/22/23 09:04	05/24/23 22:10	1
Chromium	<0.0050		0.0050		mg/L		05/22/23 09:04	05/24/23 00:21	1
Cobalt	0.0052		0.0010		mg/L		05/22/23 09:04	05/24/23 00:21	1
Lead	0.0019		0.00050		mg/L		05/22/23 09:04	05/24/23 00:21	1
Lithium	<0.010		0.010		mg/L		05/22/23 09:04	05/25/23 23:23	1
Molybdenum	<0.0050		0.0050		mg/L		05/22/23 09:04	05/24/23 00:21	1
Selenium	0.0052		0.0025		mg/L		05/22/23 09:04	05/24/23 00:21	1
Thallium	<0.0020		0.0020		mg/L		05/22/23 09:04	05/24/23 00:21	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/05/23 11:05	06/06/23 10:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	650		10		mg/L			05/22/23 01:58	1
Chloride (SM 4500 Cl- E)	34		2.0		mg/L			05/24/23 16:34	1
Fluoride (SM 4500 F C)	0.25		0.10		mg/L			05/24/23 08:35	1
Sulfate (SM 4500 SO4 E)	79		50		mg/L			05/26/23 14:26	10

Definitions/Glossary

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

Job ID: 500-233911-1

Qualifiers

Metals

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

Glossary

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

QC Association Summary

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

Job ID: 500-233911-1

Metals

Prep Batch: 714516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-1	MW-02	Total Recoverable	Water	3005A	
500-233911-2	MW-03	Total Recoverable	Water	3005A	
500-233911-3	MW-04	Total Recoverable	Water	3005A	
500-233911-4	MW-05	Total Recoverable	Water	3005A	
500-233911-5	MW-10	Total Recoverable	Water	3005A	
500-233911-6	MW-01	Total Recoverable	Water	3005A	
500-233911-7	Duplicate	Total Recoverable	Water	3005A	
MB 500-714516/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-714516/22-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 500-714516/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 715021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-1	MW-02	Total Recoverable	Water	6020A	714516
500-233911-2	MW-03	Total Recoverable	Water	6020A	714516
500-233911-3	MW-04	Total Recoverable	Water	6020A	714516
500-233911-4	MW-05	Total Recoverable	Water	6020A	714516
500-233911-5	MW-10	Total Recoverable	Water	6020A	714516
500-233911-6	MW-01	Total Recoverable	Water	6020A	714516
500-233911-7	Duplicate	Total Recoverable	Water	6020A	714516
MB 500-714516/1-A	Method Blank	Total Recoverable	Water	6020A	714516
LCS 500-714516/2-A	Lab Control Sample	Total Recoverable	Water	6020A	714516

Analysis Batch: 715273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-1	MW-02	Total Recoverable	Water	6020A	714516
500-233911-2	MW-03	Total Recoverable	Water	6020A	714516
500-233911-3	MW-04	Total Recoverable	Water	6020A	714516
500-233911-4	MW-05	Total Recoverable	Water	6020A	714516
500-233911-5	MW-10	Total Recoverable	Water	6020A	714516
500-233911-6	MW-01	Total Recoverable	Water	6020A	714516
500-233911-7	Duplicate	Total Recoverable	Water	6020A	714516
MB 500-714516/1-A	Method Blank	Total Recoverable	Water	6020A	714516
LCS 500-714516/22-A	Lab Control Sample	Total Recoverable	Water	6020A	714516

Analysis Batch: 715492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-1	MW-02	Total Recoverable	Water	6020A	714516
500-233911-2	MW-03	Total Recoverable	Water	6020A	714516
500-233911-3	MW-04	Total Recoverable	Water	6020A	714516
500-233911-4	MW-05	Total Recoverable	Water	6020A	714516
500-233911-5	MW-10	Total Recoverable	Water	6020A	714516
500-233911-6	MW-01	Total Recoverable	Water	6020A	714516
500-233911-7	Duplicate	Total Recoverable	Water	6020A	714516
MB 500-714516/1-A	Method Blank	Total Recoverable	Water	6020A	714516
LCS 500-714516/22-A	Lab Control Sample	Total Recoverable	Water	6020A	714516

Prep Batch: 716804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-1	MW-02	Total/NA	Water	7470A	
500-233911-2	MW-03	Total/NA	Water	7470A	

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QC Association Summary

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

Job ID: 500-233911-1

Metals (Continued)

Prep Batch: 716804 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-3	MW-04	Total/NA	Water	7470A	
500-233911-4	MW-05	Total/NA	Water	7470A	
500-233911-5	MW-10	Total/NA	Water	7470A	
500-233911-6	MW-01	Total/NA	Water	7470A	
500-233911-7	Duplicate	Total/NA	Water	7470A	
MB 500-716804/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-716804/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-233911-2 MS	MW-03	Total/NA	Water	7470A	
500-233911-2 MSD	MW-03	Total/NA	Water	7470A	
500-233911-2 DU	MW-03	Total/NA	Water	7470A	

Analysis Batch: 717019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-1	MW-02	Total/NA	Water	7470A	716804
500-233911-2	MW-03	Total/NA	Water	7470A	716804
500-233911-3	MW-04	Total/NA	Water	7470A	716804
500-233911-4	MW-05	Total/NA	Water	7470A	716804
500-233911-5	MW-10	Total/NA	Water	7470A	716804
500-233911-6	MW-01	Total/NA	Water	7470A	716804
500-233911-7	Duplicate	Total/NA	Water	7470A	716804
MB 500-716804/12-A	Method Blank	Total/NA	Water	7470A	716804
LCS 500-716804/13-A	Lab Control Sample	Total/NA	Water	7470A	716804
500-233911-2 MS	MW-03	Total/NA	Water	7470A	716804
500-233911-2 MSD	MW-03	Total/NA	Water	7470A	716804
500-233911-2 DU	MW-03	Total/NA	Water	7470A	716804

General Chemistry

Analysis Batch: 713901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-1	MW-02	Total/NA	Water	SM 2540C	
500-233911-2	MW-03	Total/NA	Water	SM 2540C	
500-233911-3	MW-04	Total/NA	Water	SM 2540C	
500-233911-4	MW-05	Total/NA	Water	SM 2540C	
MB 500-713901/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-713901/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 714420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-5	MW-10	Total/NA	Water	SM 2540C	
500-233911-6	MW-01	Total/NA	Water	SM 2540C	
MB 500-714420/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-714420/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 714421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-7	Duplicate	Total/NA	Water	SM 2540C	
MB 500-714421/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-714421/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-233911-7 MS	Duplicate	Total/NA	Water	SM 2540C	
500-233911-7 DU	Duplicate	Total/NA	Water	SM 2540C	

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QC Association Summary

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

Job ID: 500-233911-1

General Chemistry

Analysis Batch: 714514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-1	MW-02	Total/NA	Water	SM 4500 F C	
500-233911-2	MW-03	Total/NA	Water	SM 4500 F C	
500-233911-3	MW-04	Total/NA	Water	SM 4500 F C	
500-233911-4	MW-05	Total/NA	Water	SM 4500 F C	
MB 500-714514/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-714514/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 715052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-5	MW-10	Total/NA	Water	SM 4500 F C	
500-233911-7	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-715052/3	Method Blank	Total/NA	Water	SM 4500 F C	
MB 500-715052/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-715052/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCS 500-715052/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 715089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-1	MW-02	Total/NA	Water	SM 4500 Cl- E	
500-233911-2	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-233911-3	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-233911-4	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-233911-5	MW-10	Total/NA	Water	SM 4500 Cl- E	
500-233911-7	Duplicate	Total/NA	Water	SM 4500 Cl- E	
MB 500-715089/113	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-715089/114	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-233911-7 MS	Duplicate	Total/NA	Water	SM 4500 Cl- E	
500-233911-7 MSD	Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 715553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-1	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-233911-2	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-233911-3	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-233911-4	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-233911-5	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-233911-7	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-715553/33	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-715553/35	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

QC Sample Results

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

Job ID: 500-233911-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-714516/1-A
Matrix: Water
Analysis Batch: 715021

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 714516

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.0010		0.0010		mg/L		05/22/23 09:04	05/23/23 23:19	1
Barium	<0.0025		0.0025		mg/L		05/22/23 09:04	05/23/23 23:19	1
Beryllium	<0.0010	^+ ^1+	0.0010		mg/L		05/22/23 09:04	05/23/23 23:19	1
Boron	<0.050		0.050		mg/L		05/22/23 09:04	05/23/23 23:19	1
Cadmium	<0.00050		0.00050		mg/L		05/22/23 09:04	05/23/23 23:19	1
Calcium	<0.20		0.20		mg/L		05/22/23 09:04	05/23/23 23:19	1
Chromium	<0.0050		0.0050		mg/L		05/22/23 09:04	05/23/23 23:19	1
Cobalt	<0.0010		0.0010		mg/L		05/22/23 09:04	05/23/23 23:19	1
Lead	<0.00050		0.00050		mg/L		05/22/23 09:04	05/23/23 23:19	1
Molybdenum	<0.0050		0.0050		mg/L		05/22/23 09:04	05/23/23 23:19	1
Selenium	<0.0025		0.0025		mg/L		05/22/23 09:04	05/23/23 23:19	1
Thallium	<0.0020		0.0020		mg/L		05/22/23 09:04	05/23/23 23:19	1

Lab Sample ID: MB 500-714516/1-A
Matrix: Water
Analysis Batch: 715273

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 714516

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0030		0.0030		mg/L		05/22/23 09:04	05/24/23 21:36	1
Barium	<0.0025		0.0025		mg/L		05/22/23 09:04	05/24/23 21:36	1
Calcium	<0.20		0.20		mg/L		05/22/23 09:04	05/24/23 21:36	1

Lab Sample ID: MB 500-714516/1-A
Matrix: Water
Analysis Batch: 715492

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 714516

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lithium	<0.010		0.010		mg/L		05/22/23 09:04	05/25/23 22:56	1

Lab Sample ID: LCS 500-714516/22-A
Matrix: Water
Analysis Batch: 715273

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 714516

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	2.00	1.93		mg/L		97	80 - 120
Calcium	10.0	8.99		mg/L		90	80 - 120

Lab Sample ID: LCS 500-714516/22-A
Matrix: Water
Analysis Batch: 715492

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 714516

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

QC Sample Results

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

Job ID: 500-233911-1

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

Lab Sample ID: LCS 500-714516/2-A
Matrix: Water
Analysis Batch: 715021

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 714516

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.100	0.0988		mg/L		99	80 - 120
Beryllium	0.0500	0.0549	^+ ^1+	mg/L		110	80 - 120
Boron	1.00	1.07		mg/L		107	80 - 120
Cadmium	0.0500	0.0513		mg/L		103	80 - 120
Chromium	0.200	0.208		mg/L		104	80 - 120
Cobalt	0.500	0.522		mg/L		104	80 - 120
Lead	0.100	0.104		mg/L		104	80 - 120
Molybdenum	1.00	0.935		mg/L		94	80 - 120
Selenium	0.100	0.101		mg/L		101	80 - 120
Thallium	0.100	0.100		mg/L		100	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-716804/12-A
Matrix: Water
Analysis Batch: 717019

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 716804

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/05/23 11:05	06/06/23 09:26	1

Lab Sample ID: LCS 500-716804/13-A
Matrix: Water
Analysis Batch: 717019

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 716804

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00198	0.00208		mg/L		105	80 - 120

Lab Sample ID: 500-233911-2 MS
Matrix: Water
Analysis Batch: 717019

Client Sample ID: MW-03
Prep Type: Total/NA
Prep Batch: 716804

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

Lab Sample ID: 500-233911-2 MSD
Matrix: Water
Analysis Batch: 717019

Client Sample ID: MW-03
Prep Type: Total/NA
Prep Batch: 716804

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.00020		0.00100	0.00107		mg/L		107	75 - 125	1	20

Lab Sample ID: 500-233911-2 DU
Matrix: Water
Analysis Batch: 717019

Client Sample ID: MW-03
Prep Type: Total/NA
Prep Batch: 716804

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

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QC Sample Results

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

Job ID: 500-233911-1

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

Lab Sample ID: MB 500-713901/1
Matrix: Water
Analysis Batch: 713901

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			05/17/23 23:57	1

Lab Sample ID: LCS 500-713901/2
Matrix: Water
Analysis Batch: 713901

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

Lab Sample ID: MB 500-714420/1
Matrix: Water
Analysis Batch: 714420

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			05/22/23 00:24	1

Lab Sample ID: LCS 500-714420/2
Matrix: Water
Analysis Batch: 714420

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	242		mg/L		97	80 - 120

Lab Sample ID: MB 500-714421/1
Matrix: Water
Analysis Batch: 714421

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			05/22/23 01:53	1

Lab Sample ID: LCS 500-714421/2
Matrix: Water
Analysis Batch: 714421

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	244		mg/L		98	80 - 120

Lab Sample ID: 500-233911-7 MS
Matrix: Water
Analysis Batch: 714421

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	650		250	942		mg/L		115	75 - 125

Lab Sample ID: 500-233911-7 DU
Matrix: Water
Analysis Batch: 714421

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	650		662		mg/L		1	5

Eurofins Chicago

QC Sample Results

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

Job ID: 500-233911-1

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-715089/113
Matrix: Water
Analysis Batch: 715089

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			05/24/23 16:30	1

Lab Sample ID: LCS 500-715089/114
Matrix: Water
Analysis Batch: 715089

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	19.5		mg/L		98	85 - 115

Lab Sample ID: 500-233911-7 MS
Matrix: Water
Analysis Batch: 715089

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	34		20.0	57.3		mg/L		116	75 - 125

Lab Sample ID: 500-233911-7 MSD
Matrix: Water
Analysis Batch: 715089

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	34		20.0	56.6		mg/L		112	75 - 125	1	20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-714514/31
Matrix: Water
Analysis Batch: 714514

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			05/21/23 10:10	1

Lab Sample ID: LCS 500-714514/32
Matrix: Water
Analysis Batch: 714514

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	9.96		mg/L		100	90 - 119

Lab Sample ID: MB 500-715052/3
Matrix: Water
Analysis Batch: 715052

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			05/24/23 08:35	1

QC Sample Results

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

Job ID: 500-233911-1

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: MB 500-715052/31
Matrix: Water
Analysis Batch: 715052

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			05/24/23 08:35	1

Lab Sample ID: LCS 500-715052/32
Matrix: Water
Analysis Batch: 715052

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

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

Lab Sample ID: LCS 500-715052/4
Matrix: Water
Analysis Batch: 715052

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

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

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-715553/33
Matrix: Water
Analysis Batch: 715553

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			05/26/23 14:15	1

Lab Sample ID: LCS 500-715553/35
Matrix: Water
Analysis Batch: 715553

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	20.6		mg/L		103	88 - 123

Chain of Custody Record



Client Information		Sampler: <u>Kaelyn Sperle</u>		Lab PM: <u>Mockler, Diana J</u>		Carrier Tracking No(s): <u>500-233911 COC 91</u>																					
Client Contact: <u>Kaelyn Sperle</u>		Phone: <u>262-278-1621</u>		E-Mail: <u>Diana.Mockler@et.eurofinsus.com</u>		State of Origin: <u>IL</u>																					
Company: <u>KPRG and Associates Inc</u>		PWSID:		Analysis Requested																							
Address: <u>14665 West Lisbon Road, Suite 1A</u>		Due Date Requested: <u>Standard</u>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Field Filtered Sample (Yes or No)</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Perform SIMSD (Yes or No)</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">903.0 - Standard Target List</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Raz26Raz28_GFPC - Local Method</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">904.0 - Standard Target List</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">6020A, 7470A</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">2540C, 4500_F_C, SM4500_C1_E, SM4500_S04_E</td> </tr> </table>				Field Filtered Sample (Yes or No)	Perform SIMSD (Yes or No)	903.0 - Standard Target List	Raz26Raz28_GFPC - Local Method	904.0 - Standard Target List	6020A, 7470A	2540C, 4500_F_C, SM4500_C1_E, SM4500_S04_E													
Field Filtered Sample (Yes or No)	Perform SIMSD (Yes or No)	903.0 - Standard Target List	Raz26Raz28_GFPC - Local Method					904.0 - Standard Target List	6020A, 7470A	2540C, 4500_F_C, SM4500_C1_E, SM4500_S04_E																	
City: <u>Brookfield</u>		TAT Requested (days): <u>Standard</u>																									
State Zip: <u>WI, 53005</u>		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No																									
Phone: <u>262-781-0475(Tel)</u>		PO #: <u>4502125100</u>																									
Email: <u>kaelyns@kprginc.com</u>		WO #:																									
Project Name: <u>Powerton CCR FAB</u>		Project #: <u>50011612</u>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Total Number of containers</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Job #: <u>500-233911</u></td> </tr> </table>				Total Number of containers	Job #: <u>500-233911</u>																		
Total Number of containers	Job #: <u>500-233911</u>																										
Site: <u>Illinois</u>		SSOW#:																									
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Field Filtered Sample (Yes or No)		Perform SIMSD (Yes or No)		903.0 - Standard Target List		Raz26Raz28_GFPC - Local Method		904.0 - Standard Target List		6020A, 7470A		2540C, 4500_F_C, SM4500_C1_E, SM4500_S04_E		Preservation Codes		Special Instructions/Note	
																								A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)			
<u>MW-02</u>		<u>5/16/23</u>		<u>0906</u>		<u>G</u>		<u>Water</u>		<u>M</u>		<u>N</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>					
<u>MW-03</u>		<u>5/16/23</u>		<u>0954</u>		<u>↓</u>		<u>Water</u>		<u>M</u>		<u>N</u>		<u>↓</u>		<u>↓</u>		<u>↓</u>		<u>↓</u>		<u>↓</u>					
<u>MW-04</u>		<u>5/16/23</u>		<u>1048</u>		<u>↓</u>		<u>Water</u>		<u>M</u>		<u>N</u>		<u>↓</u>		<u>↓</u>		<u>↓</u>		<u>↓</u>		<u>↓</u>					
<u>MW-05</u>		<u>5/16/23</u>		<u>1145</u>		<u>↓</u>		<u>Water</u>		<u>M</u>		<u>N</u>		<u>↓</u>		<u>↓</u>		<u>↓</u>		<u>↓</u>		<u>↓</u>					
								<u>Water</u>																			
								<u>Water</u>																			
								<u>Water</u>																			
								<u>Water</u>																			
								<u>Water</u>																			

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

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: <u>Kaelyn Sperle</u>		Date/Time: <u>5/16/23/1700</u>		Company: <u>KPRG</u>		Received by: <u>FedEx</u>	
Relinquished by:		Date/Time:		Company:		Received by: <u>FedEx</u>	
Relinquished by:		Date/Time:		Company:		Received by: <u>[Signature]</u>	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: <u>4.6-4.5</u>		Date/Time: <u>5/16/23 1000</u>	

Eurofins Chicago

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

Chain of Custody Record



Environment Testing

Client Information Client Contact: Kaelyn Sperle Company: KPRG and Associates, Inc. Address: 14665 West Lisbon Road, Suite 1A City: Brookfield State, Zip: WI, 53005 Phone: 262-781-0475(Tel) Email: kaelyns@kprginc.com Project Name: Powerton CCR FAB Site: Illinois			Sampler: Kaelyn Sperle Phone: 262-278-1621 PWSID:		Lab PM: Mockler, Diana J E-Mail: Diana Mockler@et.eurofins.com		Carrier Tracking No(s): 500-233911 COC 1 State of Origin: IL							
Due Date Requested: Standard TAT Requested (days): Standard Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 4502125100 Project #: 50011612 SSOW#:			Analysis Requested Perform MS/MSD (Yes or No) [] 903.0 - Standard Target List [] Ra226Ra228_GPPC - Local Method [] 904.0 - Standard Target List [] 6020A, 7470A [] 2540C, 4500_F_C, SM4500_CL_E, SM4500_SO4_E [] Total Number of Containers:					Preservation Codes A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)						
Sample Identification			Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Field Filtered Sample (Yes or No)		Special Instructions/Note:	
			X		X		X		X		X		X	
5 MW-10			5/17/23		0908		G		Water		N		N	
6 MW-01			5/17/23		1236		↓		Water		N		N	
7 Duplicate			5/17/23		-		↓		Water		N		N	
									Water					
									Water					
									Water					
									Water					
									Water					

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Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological			Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested I, II, III, IV Other (specify)			Special Instructions/QC Requirements				
Empty Kit Relinquished by: Kaelyn Sperle		Date: 5/17/23/1730		Time:		Method of Shipment:	
Relinquished by: Kaelyn Sperle		Date/Time: 5/17/23/1730		Company: KPRG		Received by: FedEx	
Relinquished by:		Date/Time:		Company:		Received by:	
Relinquished by:		Date/Time:		Company:		Received by:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: 0.9 - 0.1			

Ver 01/16/2019

RTD 10 30 9659
ST 18

Part # 156297-438 HDB EXP 11/23

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

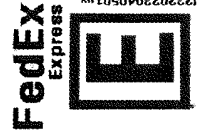
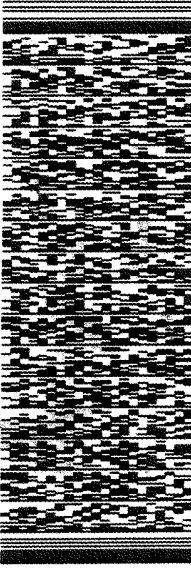
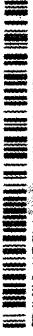
SHIP DATE: 18MAY23
ACTWT: 58.00 LB
CRD: 8994779/SSF2420
DIMS: 24x18x12 IN

BILL THIRD PARTY

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

UNIVERSITY PARK IL 60484

(000) 000-0000 REF: DEPT:
NO. PO:



12320290405017

4 of 4

MPS# 3983 9576 9659

0263

Mstr# 3983 9576 9626

XN JOTA

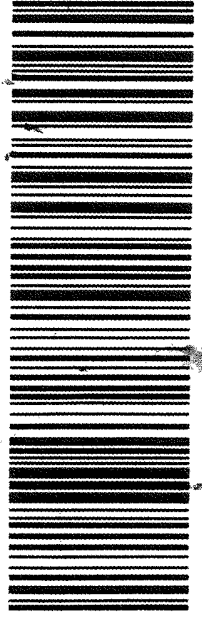
0201

60484

IL-US ORD

WED - 17 MAY 10:30A
PRIORITY OVERNIGHT

500-233911 Waybi



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

SHIP DATE: 17MAY23
ACTWGT: 50.00 LB
CAD: 6994729/55FE2420
DIMS: 24x18x12 IN
BILL THIRD PARTY

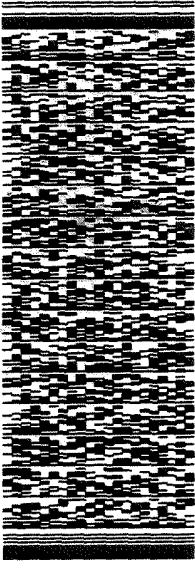
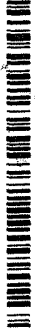
TO **SAMPLE RECEIVING**
EUROFINS
2417 BOND ST

UNIVERSITY PARK IL 60484

(000) 000-0000
NO:
PSI

REF:

DEPT:



FedEx
Express



J23202304050101

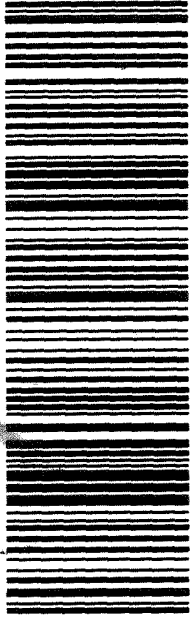
THU - 18 MAY 10:30A
PRIORITY OVERNIGHT

3 of 6
MPS# 3984 4873 0163
Mstr# 3984 4873 0141

0201

XN JOTA

60484
IL-US ORD



500-233911 Waybl

Part # 156297-435 RRDB2 EXP 09/23
583J3/2BC3/FE3D



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-233911-1

Login Number: 233911

List Number: 1

Creator: James, Jeff A

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Lab Chronicle

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

Job ID: 500-233911-1

Client Sample ID: MW-02
Date Collected: 05/16/23 09:06
Date Received: 05/17/23 10:00

Lab Sample ID: 500-233911-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715021	FXG	EET CHI	05/23/23 23:53
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715273	FXG	EET CHI	05/24/23 21:43
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715492	FXG	EET CHI	05/25/23 23:03
Total/NA	Prep	7470A			716804	MJG	EET CHI	06/05/23 11:05 - 06/05/23 13:05 ¹
Total/NA	Analysis	7470A		1	717019	MJG	EET CHI	06/06/23 10:02
Total/NA	Analysis	SM 2540C		1	713901	CLB	EET CHI	05/18/23 00:33
Total/NA	Analysis	SM 4500 CI- E		2	715089	MM	EET CHI	05/24/23 16:33
Total/NA	Analysis	SM 4500 F C		1	714514	EH	EET CHI	05/21/23 10:10
Total/NA	Analysis	SM 4500 SO4 E		5	715553	MM	EET CHI	05/26/23 14:25

Client Sample ID: MW-03
Date Collected: 05/16/23 09:54
Date Received: 05/17/23 10:00

Lab Sample ID: 500-233911-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715021	FXG	EET CHI	05/23/23 23:57
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715273	FXG	EET CHI	05/24/23 21:46
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715492	FXG	EET CHI	05/25/23 23:06
Total/NA	Prep	7470A			716804	MJG	EET CHI	06/05/23 11:05 - 06/05/23 13:05 ¹
Total/NA	Analysis	7470A		1	717019	MJG	EET CHI	06/06/23 10:04
Total/NA	Analysis	SM 2540C		1	713901	CLB	EET CHI	05/18/23 00:35
Total/NA	Analysis	SM 4500 CI- E		2	715089	MM	EET CHI	05/24/23 16:34
Total/NA	Analysis	SM 4500 F C		1	714514	EH	EET CHI	05/21/23 10:10
Total/NA	Analysis	SM 4500 SO4 E		2	715553	MM	EET CHI	05/26/23 14:25

Client Sample ID: MW-04
Date Collected: 05/16/23 10:48
Date Received: 05/17/23 10:00

Lab Sample ID: 500-233911-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715021	FXG	EET CHI	05/24/23 00:00
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715273	FXG	EET CHI	05/24/23 21:50
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715492	FXG	EET CHI	05/25/23 23:10
Total/NA	Prep	7470A			716804	MJG	EET CHI	06/05/23 11:05 - 06/05/23 13:05 ¹
Total/NA	Analysis	7470A		1	717019	MJG	EET CHI	06/06/23 10:12

Eurofins Chicago

Lab Chronicle

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

Job ID: 500-233911-1

Client Sample ID: MW-04
Date Collected: 05/16/23 10:48
Date Received: 05/17/23 10:00

Lab Sample ID: 500-233911-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	713901	CLB	EET CHI	05/18/23 00:38
Total/NA	Analysis	SM 4500 CI- E		5	715089	MM	EET CHI	05/24/23 16:34
Total/NA	Analysis	SM 4500 F C		1	714514	EH	EET CHI	05/21/23 10:10
Total/NA	Analysis	SM 4500 SO4 E		10	715553	MM	EET CHI	05/26/23 14:26

Client Sample ID: MW-05
Date Collected: 05/16/23 11:45
Date Received: 05/17/23 10:00

Lab Sample ID: 500-233911-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715021	FXG	EET CHI	05/24/23 00:04
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715273	FXG	EET CHI	05/24/23 21:53
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715492	FXG	EET CHI	05/25/23 23:13
Total/NA	Prep	7470A			716804	MJG	EET CHI	06/05/23 11:05 - 06/05/23 13:05 ¹
Total/NA	Analysis	7470A		1	717019	MJG	EET CHI	06/06/23 10:18
Total/NA	Analysis	SM 2540C		1	713901	CLB	EET CHI	05/18/23 00:40
Total/NA	Analysis	SM 4500 CI- E		5	715089	MM	EET CHI	05/24/23 16:35
Total/NA	Analysis	SM 4500 F C		1	714514	EH	EET CHI	05/21/23 10:10
Total/NA	Analysis	SM 4500 SO4 E		5	715553	MM	EET CHI	05/26/23 14:26

Client Sample ID: MW-10
Date Collected: 05/17/23 09:08
Date Received: 05/18/23 09:40

Lab Sample ID: 500-233911-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715021	FXG	EET CHI	05/24/23 00:07
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715273	FXG	EET CHI	05/24/23 21:56
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715492	FXG	EET CHI	05/25/23 23:16
Total/NA	Prep	7470A			716804	MJG	EET CHI	06/05/23 11:05 - 06/05/23 13:05 ¹
Total/NA	Analysis	7470A		1	717019	MJG	EET CHI	06/06/23 10:21
Total/NA	Analysis	SM 2540C		1	714420	CLB	EET CHI	05/22/23 01:20
Total/NA	Analysis	SM 4500 CI- E		2	715089	MM	EET CHI	05/24/23 16:35
Total/NA	Analysis	SM 4500 F C		1	715052	EH	EET CHI	05/24/23 08:35
Total/NA	Analysis	SM 4500 SO4 E		2	715553	MM	EET CHI	05/26/23 14:26

Lab Chronicle

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

Job ID: 500-233911-1

Client Sample ID: MW-01
Date Collected: 05/17/23 12:36
Date Received: 05/18/23 09:40

Lab Sample ID: 500-233911-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715021	FXG	EET CHI	05/24/23 00:10
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715273	FXG	EET CHI	05/24/23 22:07
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715492	FXG	EET CHI	05/25/23 23:20
Total/NA	Prep	7470A			716804	MJG	EET CHI	06/05/23 11:05 - 06/05/23 13:05 ¹
Total/NA	Analysis	7470A		1	717019	MJG	EET CHI	06/06/23 10:23
Total/NA	Analysis	SM 2540C		1	714420	CLB	EET CHI	05/22/23 01:23

Client Sample ID: Duplicate
Date Collected: 05/17/23 00:00
Date Received: 05/18/23 09:40

Lab Sample ID: 500-233911-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715021	FXG	EET CHI	05/24/23 00:21
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715273	FXG	EET CHI	05/24/23 22:10
Total Recoverable	Prep	3005A			714516	BDE	EET CHI	05/22/23 09:04 - 05/22/23 09:34 ¹
Total Recoverable	Analysis	6020A		1	715492	FXG	EET CHI	05/25/23 23:23
Total/NA	Prep	7470A			716804	MJG	EET CHI	06/05/23 11:05 - 06/05/23 13:05 ¹
Total/NA	Analysis	7470A		1	717019	MJG	EET CHI	06/06/23 10:25
Total/NA	Analysis	SM 2540C		1	714421	CLB	EET CHI	05/22/23 01:58
Total/NA	Analysis	SM 4500 CI- E		1	715089	MM	EET CHI	05/24/23 16:34
Total/NA	Analysis	SM 4500 F C		1	715052	EH	EET CHI	05/24/23 08:35
Total/NA	Analysis	SM 4500 SO4 E		10	715553	MM	EET CHI	05/26/23 14:26

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

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 500-233911-1

Laboratory: Eurofins Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-29-24

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 6/21/2023 4:29:27 PM

JOB DESCRIPTION

Powerton CCR FAB (RAD)

JOB NUMBER

500-233911-2

Eurofins Chicago

Job Notes

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Authorization



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Authorized for release by
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Diana.Mockler@et.eurofinsus.com
(219)252-7570



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Case Narrative

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

Job ID: 500-233911-2

Job ID: 500-233911-2

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-233911-2

Receipt

The samples were received on 5/17/2023 10:00 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 0.1° C and 4.5° C.

RAD

Methods 903.0, 9315: Radium-226 batch 613264

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

MW-02 (500-233911-1), MW-03 (500-233911-2), (LCS 160-613264/2-A), (LCSD 160-613264/3-A) and (MB 160-613264/1-A)

Method 903.0: Radium-226 batch 613094

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-04 (500-233911-3), MW-05 (500-233911-4), (LCS 160-613094/2-A), (MB 160-613094/1-A), (500-233887-G-3-A) and (500-233887-F-3-A DU)

Methods 903.0, 9315: Radium-226 batch 613260

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-10 (500-233911-5), MW-01 (500-233911-6), Duplicate (500-233911-7), (LCS 160-613260/2-A), (MB 160-613260/1-A), (500-233887-E-4-A) and (500-233887-G-4-B DU)

Method 904.0: Radium-228 batch 613098

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-04 (500-233911-3), MW-05 (500-233911-4), (LCS 160-613098/2-A), (MB 160-613098/1-A), (500-233887-G-3-B) and (500-233887-F-3-B DU)

Methods 904.0, 9320: Radium-228 batch 613351

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

MW-02 (500-233911-1), MW-03 (500-233911-2), (LCS 160-613351/2-A), (LCSD 160-613351/3-A) and (MB 160-613351/1-A)

Methods 904.0, 9320: Radium-228 batch 613360

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-10 (500-233911-5), MW-01 (500-233911-6), Duplicate (500-233911-7), (LCS 160-613360/2-A), (MB 160-613360/1-A), (500-233887-E-4-B) and (500-233887-G-4-C DU)

Method PrecSep_0:

Method PrecSep_0:

Method PrecSep_0:

Case Narrative

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

Job ID: 500-233911-2

Job ID: 500-233911-2 (Continued)

Laboratory: Eurofins Chicago (Continued)

Method PrecSep-21:

Method PrecSep-21:

Method PrecSep-21:

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

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Method Summary

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

Job ID: 500-233911-2

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

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

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

Sample Summary

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

Job ID: 500-233911-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-233911-1	MW-02	Water	05/16/23 09:06	05/17/23 10:00
500-233911-2	MW-03	Water	05/16/23 09:54	05/17/23 10:00
500-233911-3	MW-04	Water	05/16/23 10:48	05/17/23 10:00
500-233911-4	MW-05	Water	05/16/23 11:45	05/17/23 10:00
500-233911-5	MW-10	Water	05/17/23 09:08	05/18/23 09:40
500-233911-6	MW-01	Water	05/17/23 12:36	05/18/23 09:40
500-233911-7	Duplicate	Water	05/17/23 00:00	05/18/23 09:40

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Client Sample Results

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

Job ID: 500-233911-2

Client Sample ID: MW-02
Date Collected: 05/16/23 09:06
Date Received: 05/17/23 10:00

Lab Sample ID: 500-233911-1
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0395	U	0.194	0.195	1.00	0.371	pCi/L	05/26/23 11:20	06/20/23 20:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		30 - 110					05/26/23 11:20	06/20/23 20:50	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.108	U	0.291	0.291	1.00	0.519	pCi/L	05/26/23 11:25	06/20/23 11:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		30 - 110					05/26/23 11:25	06/20/23 11:43	1
Y Carrier	79.3		30 - 110					05/26/23 11:25	06/20/23 11:43	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.147	U	0.350	0.350	5.00	0.519	pCi/L		06/21/23 09:44	1

Client Sample Results

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

Job ID: 500-233911-2

Client Sample ID: MW-03
Date Collected: 05/16/23 09:54
Date Received: 05/17/23 10:00

Lab Sample ID: 500-233911-2
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0720	U	0.164	0.165	1.00	0.301	pCi/L	05/26/23 11:20	06/20/23 20:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.4		30 - 110					05/26/23 11:20	06/20/23 20:50	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.921		0.487	0.494	1.00	0.713	pCi/L	05/26/23 11:25	06/20/23 11:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.4		30 - 110					05/26/23 11:25	06/20/23 11:43	1
Y Carrier	87.5		30 - 110					05/26/23 11:25	06/20/23 11:43	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.993		0.514	0.521	5.00	0.713	pCi/L		06/21/23 09:44	1

Client Sample Results

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

Job ID: 500-233911-2

Client Sample ID: MW-04
Date Collected: 05/16/23 10:48
Date Received: 05/17/23 10:00

Lab Sample ID: 500-233911-3
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0143	U	0.154	0.154	1.00	0.308	pCi/L	05/25/23 10:10	06/20/23 08:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.8		30 - 110					05/25/23 10:10	06/20/23 08:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.212	U	0.362	0.363	1.00	0.624	pCi/L	05/25/23 10:14	06/19/23 14:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.8		30 - 110					05/25/23 10:14	06/19/23 14:39	1
Y Carrier	81.1		30 - 110					05/25/23 10:14	06/19/23 14:39	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.226	U	0.393	0.394	5.00	0.624	pCi/L		06/21/23 11:14	1

Client Sample Results

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

Job ID: 500-233911-2

Client Sample ID: MW-05
Date Collected: 05/16/23 11:45
Date Received: 05/17/23 10:00

Lab Sample ID: 500-233911-4
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0459	U	0.174	0.174	1.00	0.330	pCi/L	05/25/23 10:10	06/20/23 08:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.5		30 - 110					05/25/23 10:10	06/20/23 08:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0863	U	0.356	0.356	1.00	0.648	pCi/L	05/25/23 10:14	06/19/23 14:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.5		30 - 110					05/25/23 10:14	06/19/23 14:39	1
Y Carrier	80.0		30 - 110					05/25/23 10:14	06/19/23 14:39	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.132	U	0.396	0.396	5.00	0.648	pCi/L		06/21/23 11:14	1

Client Sample Results

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

Job ID: 500-233911-2

Client Sample ID: MW-10

Lab Sample ID: 500-233911-5

Date Collected: 05/17/23 09:08

Matrix: Water

Date Received: 05/18/23 09:40

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.05		0.477	0.486	1.00	0.554	pCi/L	05/26/23 09:29	06/20/23 22:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		30 - 110					05/26/23 09:29	06/20/23 22:37	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.47		0.676	0.690	1.00	0.931	pCi/L	05/26/23 13:14	06/20/23 11:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		30 - 110					05/26/23 13:14	06/20/23 11:22	1
Y Carrier	89.0		30 - 110					05/26/23 13:14	06/20/23 11:22	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.52		0.827	0.844	5.00	0.931	pCi/L		06/21/23 15:27	1

Client Sample Results

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

Job ID: 500-233911-2

Client Sample ID: MW-01

Lab Sample ID: 500-233911-6

Date Collected: 05/17/23 12:36

Matrix: Water

Date Received: 05/18/23 09:40

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0694	U	0.114	0.114	1.00	0.278	pCi/L	05/26/23 09:29	06/20/23 22:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		30 - 110					05/26/23 09:29	06/20/23 22:37	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.128	U	0.207	0.208	1.00	0.357	pCi/L	05/26/23 13:14	06/20/23 11:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		30 - 110					05/26/23 13:14	06/20/23 11:22	1
Y Carrier	89.0		30 - 110					05/26/23 13:14	06/20/23 11:22	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0586	U	0.236	0.237	5.00	0.357	pCi/L		06/21/23 15:27	1

Client Sample Results

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

Job ID: 500-233911-2

Client Sample ID: Duplicate

Lab Sample ID: 500-233911-7

Date Collected: 05/17/23 00:00

Matrix: Water

Date Received: 05/18/23 09:40

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.01		0.355	0.367	1.00	0.336	pCi/L	05/26/23 09:29	06/20/23 22:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		30 - 110					05/26/23 09:29	06/20/23 22:37	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.900		0.442	0.450	1.00	0.605	pCi/L	05/26/23 13:14	06/20/23 11:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		30 - 110					05/26/23 13:14	06/20/23 11:23	1
Y Carrier	86.7		30 - 110					05/26/23 13:14	06/20/23 11:23	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.91		0.567	0.581	5.00	0.605	pCi/L		06/21/23 15:27	1

Definitions/Glossary

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

Job ID: 500-233911-2

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

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

QC Association Summary

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

Job ID: 500-233911-2

Rad

Prep Batch: 613094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-3	MW-04	Total/NA	Water	PrecSep-21	
500-233911-4	MW-05	Total/NA	Water	PrecSep-21	
MB 160-613094/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-613094/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 613098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-3	MW-04	Total/NA	Water	PrecSep_0	
500-233911-4	MW-05	Total/NA	Water	PrecSep_0	
MB 160-613098/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-613098/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 613260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-5	MW-10	Total/NA	Water	PrecSep-21	
500-233911-6	MW-01	Total/NA	Water	PrecSep-21	
500-233911-7	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-613260/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-613260/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 613264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-1	MW-02	Total/NA	Water	PrecSep-21	
500-233911-2	MW-03	Total/NA	Water	PrecSep-21	
MB 160-613264/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-613264/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-613264/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 613351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-1	MW-02	Total/NA	Water	PrecSep_0	
500-233911-2	MW-03	Total/NA	Water	PrecSep_0	
MB 160-613351/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-613351/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-613351/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 613360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233911-5	MW-10	Total/NA	Water	PrecSep_0	
500-233911-6	MW-01	Total/NA	Water	PrecSep_0	
500-233911-7	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-613360/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-613360/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

QC Sample Results

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

Job ID: 500-233911-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-613094/1-A
Matrix: Water
Analysis Batch: 616862

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 613094

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared		Analyzed		Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)				05/25/23 10:10	06/20/23 08:13			
Radium-226	0.003634	U	0.101	0.101	1.00	0.218	pCi/L	05/25/23 10:10	06/20/23 08:13		1	
Carrier	MB		Limits					Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	MB Qualifier	30 - 110					05/25/23 10:10	06/20/23 08:13	1		
	90.5											

Lab Sample ID: LCS 160-613094/2-A
Matrix: Water
Analysis Batch: 616862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 613094

Analyte	LCS		Spike	LCS	Total	RL	MDC	Unit	%Rec	%Rec	
	Result	LCS Qual	Added	Result	Uncert. (2σ+/-)					Limits	
Radium-226			11.3	9.528	1.19	1.00	0.208	pCi/L	84	75 - 125	
Carrier	LCS		Limits								
Ba Carrier	%Yield	LCS Qualifier	30 - 110								
	93.4										

Lab Sample ID: MB 160-613260/1-A
Matrix: Water
Analysis Batch: 616866

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 613260

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared		Analyzed		Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)				05/26/23 09:29	06/20/23 20:52			
Radium-226	-0.03010	U	0.129	0.129	1.00	0.292	pCi/L	05/26/23 09:29	06/20/23 20:52		1	
Carrier	MB		Limits					Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	MB Qualifier	30 - 110					05/26/23 09:29	06/20/23 20:52	1		
	87.0											

Lab Sample ID: LCS 160-613260/2-A
Matrix: Water
Analysis Batch: 616866

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 613260

Analyte	LCS		Spike	LCS	Total	RL	MDC	Unit	%Rec	%Rec	
	Result	LCS Qual	Added	Result	Uncert. (2σ+/-)					Limits	
Radium-226			11.3	9.751	1.28	1.00	0.348	pCi/L	86	75 - 125	
Carrier	LCS		Limits								
Ba Carrier	%Yield	LCS Qualifier	30 - 110								
	85.4										

Lab Sample ID: MB 160-613264/1-A
Matrix: Water
Analysis Batch: 616863

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 613264

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared		Analyzed		Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)				05/26/23 09:45	06/20/23 19:05			
Radium-226	0.07447	U	0.182	0.182	1.00	0.331	pCi/L	05/26/23 09:45	06/20/23 19:05		1	

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QC Sample Results

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

Job ID: 500-233911-2

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

Lab Sample ID: MB 160-613264/1-A
Matrix: Water
Analysis Batch: 616863

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 613264

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	95.7		30 - 110	05/26/23 09:45	06/20/23 19:05	1

Lab Sample ID: LCS 160-613264/2-A
Matrix: Water
Analysis Batch: 616863

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 613264

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	9.719		1.27	1.00	0.364	pCi/L	86	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	87.7		30 - 110

Lab Sample ID: LCSD 160-613264/3-A
Matrix: Water
Analysis Batch: 616863

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 613264

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	11.3	10.66		1.36	1.00	0.368	pCi/L	94	75 - 125	0.36	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	89.8		30 - 110

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-613098/1-A
Matrix: Water
Analysis Batch: 616572

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 613098

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4105	U	0.369	0.370	1.00	0.584	pCi/L	05/25/23 10:14	06/19/23 14:27	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	90.5		30 - 110	05/25/23 10:14	06/19/23 14:27	1
Y Carrier	84.1		30 - 110	05/25/23 10:14	06/19/23 14:27	1

Lab Sample ID: LCS 160-613098/2-A
Matrix: Water
Analysis Batch: 616572

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 613098

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	8.11	9.727		1.35	1.00	0.644	pCi/L	120	75 - 125

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QC Sample Results

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

Job ID: 500-233911-2

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

Lab Sample ID: LCS 160-613098/2-A
Matrix: Water
Analysis Batch: 616572

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 613098

Carrier	LCS		Limits
	%Yield	Qualifier	
Ba Carrier	93.4		30 - 110
Y Carrier	82.2		30 - 110

Lab Sample ID: MB 160-613351/1-A
Matrix: Water
Analysis Batch: 616862

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 613351

Analyte	MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared		Analyzed		Dil Fac
	Result	Qualifier										
Radium-228	0.4522	U	0.318	0.320	1.00	0.472	pCi/L	05/26/23 11:25	06/20/23 11:35		1	

Carrier	MB		Limits	Prepared		Analyzed		Dil Fac
	%Yield	Qualifier						
Ba Carrier	95.7		30 - 110	05/26/23 11:25	06/20/23 11:35		1	
Y Carrier	81.5		30 - 110	05/26/23 11:25	06/20/23 11:35		1	

Lab Sample ID: LCS 160-613351/2-A
Matrix: Water
Analysis Batch: 616862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 613351

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
									Radium-228	8.10

Carrier	LCS		Limits
	%Yield	Qualifier	
Ba Carrier	87.7		30 - 110
Y Carrier	82.6		30 - 110

Lab Sample ID: LCSD 160-613351/3-A
Matrix: Water
Analysis Batch: 616862

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 613351

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		RER	RER Limit
									Radium-228	8.10	9.900	

Carrier	LCSD		Limits
	%Yield	Qualifier	
Ba Carrier	89.8		30 - 110
Y Carrier	78.5		30 - 110

Lab Sample ID: MB 160-613360/1-A
Matrix: Water
Analysis Batch: 616868

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 613360

Analyte	MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared		Analyzed		Dil Fac
	Result	Qualifier										
Radium-228	0.1566	U	0.299	0.299	1.00	0.517	pCi/L	05/26/23 13:14	06/20/23 11:15		1	

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QC Sample Results

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

Job ID: 500-233911-2

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

Lab Sample ID: MB 160-613360/1-A
Matrix: Water
Analysis Batch: 616868

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 613360

Carrier	MB MB		Limits
	%Yield	Qualifier	
Ba Carrier	87.0		30 - 110
Y Carrier	86.4		30 - 110

Prepared	Analyzed	Dil Fac
05/26/23 13:14	06/20/23 11:15	1
05/26/23 13:14	06/20/23 11:15	1

Lab Sample ID: LCS 160-613360/2-A
Matrix: Water
Analysis Batch: 616868

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 613360

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec
									Limits
Radium-228	8.10	8.095		1.15	1.00	0.499	pCi/L	100	75 - 125

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	85.4		30 - 110
Y Carrier	88.2		30 - 110

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

Chain of Custody Record



Environment Testing

Client Information Client Contact: Kaelyn Sperle Company: KPRG and Associates Inc Address: 14665 West Lisbon Road, Suite 1A City: Brookfield State Zip: WI, 53005 Phone: 262-781-0475(Tel) Email: kaelyns@kprginc.com Project Name: Powerton CCR FAB Site: Illinois				Sampler: <u>Kaelyn Sperle</u> Phone: <u>262-278-1621</u> PWSID		Lab PM: Mockler, Diana J E-Mail: Diana.Mockler@et.eurofinsus.com Carrier Tracking No(s): 500-233911 COC 91		State of Origin: <u>IL</u> Page 1 of 1 Job #: <u>500-233911</u>	
Analysis Requested Due Date Requested: <u>Standard</u> TAT Requested (days): <u>Standard</u> Compliance Project: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No PO #: 4502125100 WO #:				Field Filtered Sample (Yes or No)		Perform SIMS (Yes or No)		Total Number of containers	
Sample Identification				903.0 - Standard Target List Raz26Raz28_GFPC - Local Method 904.0 - Standard Target List 6020A, 7470A 2540C, 4500_F_C, SM4500_C1_E, SM4500_S04_E		Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)		Other:	
Sample	Date	Time	Type	Matrix	Field Filtered	SimS	Target List	Containers	Special Instructions/Note
MW-02	5/16/23	0906	G	Water	X	X	X	X	
MW-03	5/16/23	0954		Water	N	N			
MW-04	5/16/23	1048		Water	N	N			
MW-05	5/16/23	1145		Water	N	N			
				Water					
				Water					
				Water					
				Water					



Possible Hazard Identification: Non-Hazard, Flammable, Skin Irritant, Poison B, Unknown, Radiological
 Sample Disposal: (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client, Disposal By Lab, Archive For _____ Months

Deliverable Requested: I II III IV Other (specify):
 Special Instructions/QC Requirements:
 Empty Kit Relinquished by: Kaelyn Sperle Date: 5/16/23 Time: 1700 Company: KPRG
 Relinquished by: [Signature] Date/Time: 5/16/23/1700
 Received by: [Signature] Date/Time: 5/16/23/1800 Company: FedEx
 Relinquished by: Date/Time: Company: Received by: Date/Time: Company:
 Custody Seals Intact: Yes No
 Custody Seal No: Cooler Temperature(s) °C and Other Remarks: 4.6-4.5

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

Chain of Custody Record



Environment Testing

Client Information		Sampler: <u>Kaelyn Sperle</u>		Lab PM: <u>Mockler, Diana J</u>		Carrier Tracking No(s):		500-233911 COC 1																			
Client Contact: <u>Kaelyn Sperle</u>		Phone: <u>262-278-1621</u>		E-Mail: <u>Diana Mockler@et.eurofins.com</u>		State of Origin: <u>IL</u>																					
Company: <u>KPRG and Associates, Inc</u>		PWSID:		Analysis Requested						Job #:																	
Address: <u>14665 West Lisbon Road, Suite 1A</u>		Due Date Requested: <u>Standard</u>		<table border="1"> <tr> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>903.0 - Standard Target List</th> <th>Ra226Ra228_GPPC - Local Method</th> <th>904.0 - Standard Target List</th> <th>6020A, 7470A</th> <th>2540C, 4500_F_C, SM4500_CL_E, SM4500_SO4_E</th> <th>Total Number of Containers</th> </tr> <tr> <td>X</td> <td>X</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>N</td> <td>X</td> </tr> </table>						Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0 - Standard Target List	Ra226Ra228_GPPC - Local Method	904.0 - Standard Target List	6020A, 7470A	2540C, 4500_F_C, SM4500_CL_E, SM4500_SO4_E	Total Number of Containers	X	X	D	D	D	D	N	X	Preservation Codes	
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0 - Standard Target List	Ra226Ra228_GPPC - Local Method							904.0 - Standard Target List	6020A, 7470A	2540C, 4500_F_C, SM4500_CL_E, SM4500_SO4_E	Total Number of Containers														
X	X	D	D							D	D	N	X														
City: <u>Brookfield</u>		TAT Requested (days): <u>Standard</u>								A - HCL		M - Hexane															
State, Zip: <u>WI, 53005</u>		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No								B - NaOH		N - None															
Phone: <u>262-781-0475(Tel)</u>		PO #: <u>4502125100</u>		C - Zn Acetate		O - AsNaO2																					
Email: <u>kaelyns@kprginc.com</u>		WO #:		D - Nitric Acid		P - Na2O4S																					
Project Name: <u>Powerton CCR FAB</u>		Project #: <u>50011612</u>		E - NaHSO4		Q - Na2SO3																					
Site: <u>Illinois</u>		SSOW#:		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																					
				Other:		Z - other (specify)																					
										Special Instructions/Note:																	

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Possible Hazard Identification				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological				<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			

Deliverable Requested I, II, III, IV Other (specify) _____ Special Instructions/QC Requirements _____

Empty Kit Relinquished by		Date		Time		Method of Shipment:	
Relinquished by: <u>Kaelyn Sperle</u>		Date/Time: <u>5/17/23/1730</u>		Company: <u>KPRG</u>		Received by: <u>FedEx</u>	
Relinquished by:		Date/Time:		Company:		Date/Time: <u>5/17/23/1730</u>	
Relinquished by:		Date/Time:		Company:		Date/Time: <u>5/18/23 0840</u>	
Relinquished by:		Date/Time:		Company:		Date/Time:	

Custody Seals Intact: Yes No Custody Seal No _____ Cooler Temperature(s) °C and Other Remarks: 0.9 - 0.1

RTD 10 30 9659
ST 18 17

Part # 156297-438 HDB EXP 11/23

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

SHIP DATE: 18MAY23
ACTWT: 58.00 LB
CRD: 8994779/SSF2420
DIMS: 24x18x12 IN

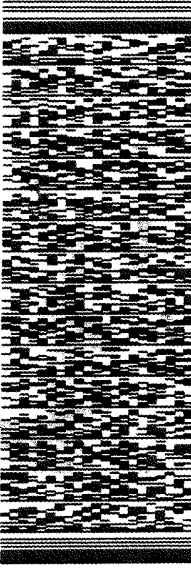
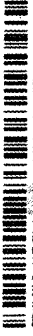
BILL THIRD PARTY

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

UNIVERSITY PARK IL 60484

(000) 000-0000 REF:
NO. PO:

DEPT:



12320290405017

WED - 17 MAY 10:30A
PRIORITY OVERNIGHT

4 of 4

MPS# **3983 9576 9659**

0263

Mstr# **3983 9576 9626**

0201

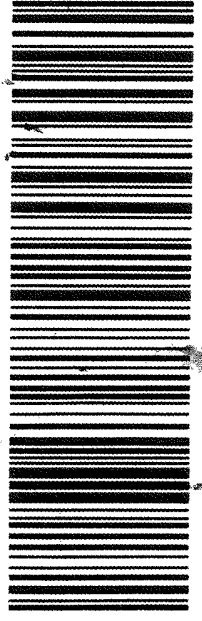
XN JOTA

60484

IL-US ORD



500-233911 Waybi



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

SHIP DATE: 17MAY23
ACTWGT: 50.00 LB
CAD: 6994729/SSFE2420
DIMS: 24x18x12 IN
BILL THIRD PARTY

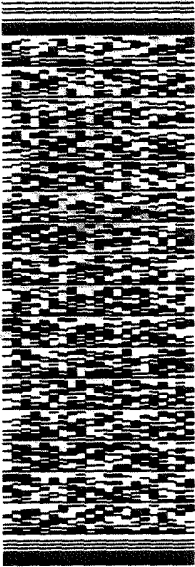
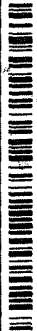
TO **SAMPLE RECEIVING**
EUROFINS
2417 BOND ST

UNIVERSITY PARK IL 60484

(000) 000-0000
NO:
PSI

REF:

DEPT:



FedEx
Express



J232023040501

THU - 18 MAY 10:30A
PRIORITY OVERNIGHT

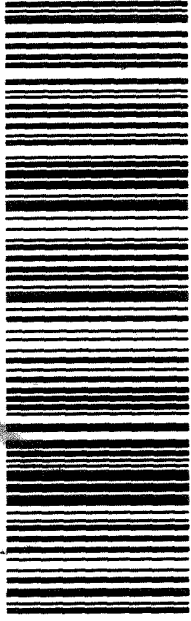
3 of 6
MPS# 3984 4873 0163
0263

Mstr# 3984 4873 0141

0201

XN JOTA

60484
IL-US ORD



500-233911 Waybl



Part # 156297-435 RRDB2 EXP 09/23
583J3/2BC3/FE3D



Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Camr Tracking No(s):	COC No:		
Client Contact: Shipping/Receiving		Phone:	Mockler, Diana J	State of Origin: Illinois	500-174050.1		
Company: TestAmerica Laboratories, Inc.		E-Mail: Diana.Mockler@et.eurofins.com		Page: 1 of 1			
Address: 13715 Rider Trail North,		Accreditations Required (See note): NELAP - Illinois		Job #: 500-233911-2			
City: Earth City	Due Date Requested: 6/21/2023	Analysis Requested		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)		
State, Zip: MO, 63045	TAT Requested (days):	Perform MS/MSD (Yes or No)					
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	FO #:	Field Filtered Sample (Yes or No)					
Email:	WO #:	903.0/PreSep_21 Standard Target List					
Project Name: Powerton CCR FAB (RAD)	Project #: 50011612	904.0/PreSep_0 Standard Target List					
Site: MWG - Powerton	SSOW#:	R226Ra228_GFP					
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Swab, Soil, Sludge, Biomass, A=All)	Preservation Code:	Total Number of Containers	Special Instructions/Note:
MW-10 (500-233911-5)	5/17/23	09:08 Central		Water		3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-01 (500-233911-6)	5/17/23	12:36 Central		Water		3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
Duplicate (500-233911-7)	5/17/23	Central		Water		3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
							(9)
Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Chicago attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago.							
Possible Hazard Identification							
Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)							
Primary Deliverable Rank: 2 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Empty Kit Relinquished by: _____ Date/Time: _____ Method of Shipment: _____ Relinquished by: _____ Date/Time: _____ Received by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____ Received by: _____ Date/Time: _____							
Custody Seals Intact: _____ Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: _____							



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-233911-2

Login Number: 233911

List Number: 1

Creator: James, Jeff A

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5
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: 500-233911-2

Login Number: 233911

List Number: 2

Creator: Farrell, Conor P

List Source: Eurofins St. Louis

List Creation: 05/18/23 01:30 PM

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



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-233911-2

Login Number: 233911

List Number: 3

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 05/22/23 05:45 PM

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

Lab Chronicle

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

Job ID: 500-233911-2

Client Sample ID: MW-02
Date Collected: 05/16/23 09:06
Date Received: 05/17/23 10:00

Lab Sample ID: 500-233911-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			613264	KAC	EET SL	05/26/23 11:20
Total/NA	Analysis	903.0		1	616866	FLC	EET SL	06/20/23 20:50
Total/NA	Prep	PrecSep_0			613351	KAC	EET SL	05/26/23 11:25
Total/NA	Analysis	904.0		1	616866	FLC	EET SL	06/20/23 11:43
Total/NA	Analysis	Ra226_Ra228		1	616966	SCB	EET SL	06/21/23 09:44

Client Sample ID: MW-03
Date Collected: 05/16/23 09:54
Date Received: 05/17/23 10:00

Lab Sample ID: 500-233911-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			613264	KAC	EET SL	05/26/23 11:20
Total/NA	Analysis	903.0		1	616866	FLC	EET SL	06/20/23 20:50
Total/NA	Prep	PrecSep_0			613351	KAC	EET SL	05/26/23 11:25
Total/NA	Analysis	904.0		1	616866	FLC	EET SL	06/20/23 11:43
Total/NA	Analysis	Ra226_Ra228		1	616966	SCB	EET SL	06/21/23 09:44

Client Sample ID: MW-04
Date Collected: 05/16/23 10:48
Date Received: 05/17/23 10:00

Lab Sample ID: 500-233911-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			613094	KAC	EET SL	05/25/23 10:10
Total/NA	Analysis	903.0		1	616866	FLC	EET SL	06/20/23 08:22
Total/NA	Prep	PrecSep_0			613098	KAC	EET SL	05/25/23 10:14
Total/NA	Analysis	904.0		1	616575	FLC	EET SL	06/19/23 14:39
Total/NA	Analysis	Ra226_Ra228		1	616996	SCB	EET SL	06/21/23 11:14

Client Sample ID: MW-05
Date Collected: 05/16/23 11:45
Date Received: 05/17/23 10:00

Lab Sample ID: 500-233911-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			613094	KAC	EET SL	05/25/23 10:10
Total/NA	Analysis	903.0		1	616866	FLC	EET SL	06/20/23 08:22
Total/NA	Prep	PrecSep_0			613098	KAC	EET SL	05/25/23 10:14
Total/NA	Analysis	904.0		1	616575	FLC	EET SL	06/19/23 14:39
Total/NA	Analysis	Ra226_Ra228		1	616996	SCB	EET SL	06/21/23 11:14

Lab Chronicle

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

Job ID: 500-233911-2

Client Sample ID: MW-10
Date Collected: 05/17/23 09:08
Date Received: 05/18/23 09:40

Lab Sample ID: 500-233911-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			613260	KAC	EET SL	05/26/23 09:29
Total/NA	Analysis	903.0		1	616862	FLC	EET SL	06/20/23 22:37
Total/NA	Prep	PrecSep_0			613360	KAC	EET SL	05/26/23 13:14
Total/NA	Analysis	904.0		1	616863	FLC	EET SL	06/20/23 11:22
Total/NA	Analysis	Ra226_Ra228		1	617159	EMH	EET SL	06/21/23 15:27

Client Sample ID: MW-01
Date Collected: 05/17/23 12:36
Date Received: 05/18/23 09:40

Lab Sample ID: 500-233911-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			613260	KAC	EET SL	05/26/23 09:29
Total/NA	Analysis	903.0		1	616862	FLC	EET SL	06/20/23 22:37
Total/NA	Prep	PrecSep_0			613360	KAC	EET SL	05/26/23 13:14
Total/NA	Analysis	904.0		1	616863	FLC	EET SL	06/20/23 11:22
Total/NA	Analysis	Ra226_Ra228		1	617159	EMH	EET SL	06/21/23 15:27

Client Sample ID: Duplicate
Date Collected: 05/17/23 00:00
Date Received: 05/18/23 09:40

Lab Sample ID: 500-233911-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			613260	KAC	EET SL	05/26/23 09:29
Total/NA	Analysis	903.0		1	616862	FLC	EET SL	06/20/23 22:37
Total/NA	Prep	PrecSep_0			613360	KAC	EET SL	05/26/23 13:14
Total/NA	Analysis	904.0		1	616863	FLC	EET SL	06/20/23 11:23
Total/NA	Analysis	Ra226_Ra228		1	617159	EMH	EET SL	06/21/23 15:27

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 500-233911-2

Laboratory: Eurofins St. Louis

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

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

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Tracer/Carrier Summary

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

Job ID: 500-233911-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
500-233911-1	MW-02	94.4	
500-233911-2	MW-03	86.4	
500-233911-3	MW-04	79.8	
500-233911-4	MW-05	78.5	
500-233911-5	MW-10	101	
500-233911-6	MW-01	98.2	
500-233911-7	Duplicate	101	
LCS 160-613094/2-A	Lab Control Sample	93.4	
LCS 160-613260/2-A	Lab Control Sample	85.4	
LCS 160-613264/2-A	Lab Control Sample	87.7	
LCSD 160-613264/3-A	Lab Control Sample Dup	89.8	
MB 160-613094/1-A	Method Blank	90.5	
MB 160-613260/1-A	Method Blank	87.0	
MB 160-613264/1-A	Method Blank	95.7	

Tracer/Carrier Legend
 Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
500-233911-1	MW-02	94.4	79.3
500-233911-2	MW-03	86.4	87.5
500-233911-3	MW-04	79.8	81.1
500-233911-4	MW-05	78.5	80.0
500-233911-5	MW-10	101	89.0
500-233911-6	MW-01	98.2	89.0
500-233911-7	Duplicate	101	86.7
LCS 160-613098/2-A	Lab Control Sample	93.4	82.2
LCS 160-613351/2-A	Lab Control Sample	87.7	82.6
LCS 160-613360/2-A	Lab Control Sample	85.4	88.2
LCSD 160-613351/3-A	Lab Control Sample Dup	89.8	78.5
MB 160-613098/1-A	Method Blank	90.5	84.1
MB 160-613351/1-A	Method Blank	95.7	81.5
MB 160-613360/1-A	Method Blank	87.0	86.4

Tracer/Carrier Legend
 Ba = Ba Carrier
 Y = Y Carrier

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

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

Generated 6/30/2023 10:19:08 AM

JOB DESCRIPTION

Powerton CCR FAB (MW-01 - Cl, Fl, SO4)

JOB NUMBER

500-235818-1

Eurofins Chicago

Job Notes

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

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

Authorization



Generated
6/30/2023 10:19:08 AM

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



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Case Narrative

Client: KPRG and Associates, Inc.
Project/Site: Powerton CCR FAB (MW-01 - Cl, FI, SO4)

Job ID: 500-235818-1

Job ID: 500-235818-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-235818-1

Receipt

The sample was received on 6/27/2023 10:00 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.8° C.

General Chemistry

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

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Method Summary

Client: KPRG and Associates, Inc.
Project/Site: Powerton CCR FAB (MW-01 - Cl, FI, SO4)

Job ID: 500-235818-1

Method	Method Description	Protocol	Laboratory
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

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

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Sample Summary

Client: KPRG and Associates, Inc.
Project/Site: Powerton CCR FAB (MW-01 - Cl, FI, SO4)

Job ID: 500-235818-1

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
500-235818-1	MW-01	Water	06/26/23 13:44	06/27/23 10:00

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Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Powerton CCR FAB (MW-01 - Cl, FI, SO4)

Job ID: 500-235818-1

Client Sample ID: MW-01
Date Collected: 06/26/23 13:44
Date Received: 06/27/23 10:00

Lab Sample ID: 500-235818-1
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 4500 Cl- E)	39		4.0		mg/L			06/28/23 13:51	2
Fluoride (SM 4500 F C)	<0.10		0.10		mg/L			06/28/23 18:12	1
Sulfate (SM 4500 SO4 E)	39		10		mg/L			06/29/23 09:12	2

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Definitions/Glossary

Client: KPRG and Associates, Inc.
Project/Site: Powerton CCR FAB (MW-01 - Cl, FI, SO4)

Job ID: 500-235818-1

Glossary

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

QC Association Summary

Client: KPRG and Associates, Inc.
Project/Site: Powerton CCR FAB (MW-01 - Cl, FI, SO4)

Job ID: 500-235818-1

General Chemistry

Analysis Batch: 720896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-235818-1	MW-01	Total/NA	Water	SM 4500 Cl- E	
MB 500-720896/112	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-720896/113	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 720973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-235818-1	MW-01	Total/NA	Water	SM 4500 F C	
MB 500-720973/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-720973/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 721056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-235818-1	MW-01	Total/NA	Water	SM 4500 SO4 E	
MB 500-721056/43	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-721056/44	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

QC Sample Results

Client: KPRG and Associates, Inc.
 Project/Site: Powerton CCR FAB (MW-01 - Cl, FI, SO4)

Job ID: 500-235818-1

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-720896/112
 Matrix: Water
 Analysis Batch: 720896

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			06/28/23 13:49	1

Lab Sample ID: LCS 500-720896/113
 Matrix: Water
 Analysis Batch: 720896

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	19.9		mg/L		100	85 - 115

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-720973/31
 Matrix: Water
 Analysis Batch: 720973

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			06/28/23 17:22	1

Lab Sample ID: LCS 500-720973/32
 Matrix: Water
 Analysis Batch: 720973

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	10.6		mg/L		106	90 - 119

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-721056/43
 Matrix: Water
 Analysis Batch: 721056

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			06/29/23 09:09	1

Lab Sample ID: LCS 500-721056/44
 Matrix: Water
 Analysis Batch: 721056

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	20.3		mg/L		101	88 - 123

Eurofins Chicago

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

Chain of Custody Record

MKE 232 eurofins

Client Information Client Contact: <u>Kaelyn Sperle</u> Company: <u>KPRG and Associates Inc.</u> Address: <u>14665 West Lisbon Road Suite 1A</u> City: <u>Brookfield</u> State Zip: <u>WI 53005</u> Phone: <u>262-781-0475(Tel)</u> Email: <u>kaelyns@kprginc.com</u>		Sampler: <u>Kaelyn Sperle</u> Lab PM: <u>Mockler Diana J</u> E-Mail: <u>Diana.Mockler@et.eurofinsus.com</u>		Carrier Tracking No(s): State of Origin: <u>IL</u>		COC No: <u>500-104268-44025 1</u> Page: <u>Page 1 of 1</u>	
Project Name: <u>Powerton CCR FAB</u> Site: <u>Illinois</u>		Due Date Requested: <u>Standard</u> TAT Requested (days): <u>Standard</u> Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Analysis Requested Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 903.0 - Standard Target List Ra226Ra228_GFPC - Local Method 904.0 - Standard Target List 6020A, 7470A 4500_F_C_SM4500_CL_E_SM4500_SO4_E		Job #: <u>500-235818</u> Preservation Codes: A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecylhydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Tr.zma Z other (specify)	
Sample Identification Sample Date: <u>6/26/23</u> Sample Time: <u>1344</u> Sample Type (C=comp, G=grab): <u>G</u> Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air): <u>Water</u>		Preservation Code: <u>GN</u>		Total Number of Containers:		Special Instructions/Note: <u>chloride fluoride, & sulfate only</u>	
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Deliverable Requested I II III IV Other (specify)				Special Instructions/QC Requirements			
Empty Kit Relinquished by: <u>Kaelyn Sperle</u> Date: <u>6/26/23/1730</u> Company: <u>KPRG</u>		Received by: <u>FedEx</u> Date/Time: <u>6/26/23/1730</u> Company: <u>FedEx</u>		Received by: <u>Ami Sachs</u> Date/Time: <u>6/27/23 1000</u> Company: <u>BBIA</u>			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No		Cooler Temperature(s) °C and Other Remarks: <u>5.2 → 4.8</u>					

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500-235818 Waybi

ORIGIN ID:PIAA (262) 278-1621

KPRG AND ASSOCIATES
414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 26JUN23
ACTWGT: 41.75 LB
CAD: 6894780/SSFE2422
DIMS: 23x14x15 IN

BILL THIRD PARTY

15297486 80828 11/23

TO **EUROFINS**

2417 BOND ST.

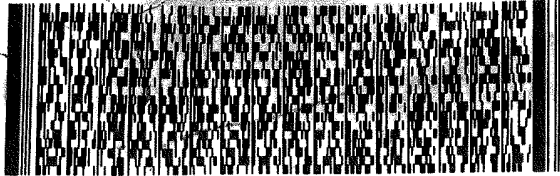
UNIVERSITY PARK IL 60484

(656) 656-6566

REF:

INV:

DEPT:



FedEx
Express



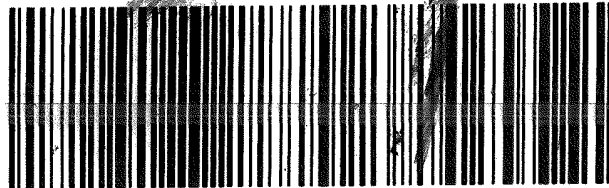
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TRK# 7803 8130 7994
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TUE - 27 JUN 10:30A
PRIORITY OVERNIGHT

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Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-235818-1

Login Number: 235818

List Number: 1

Creator: Scott, Sherri L

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Powerton CCR FAB (MW-01 - Cl, FI, SO4)

Job ID: 500-235818-1

Client Sample ID: MW-01
Date Collected: 06/26/23 13:44
Date Received: 06/27/23 10:00

Lab Sample ID: 500-235818-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 4500 Cl- E		2	720896	MM	EET CHI	06/28/23 13:51
Total/NA	Analysis	SM 4500 F C		1	720973	EH	EET CHI	06/28/23 18:12
Total/NA	Analysis	SM 4500 SO4 E		2	721056	MM	EET CHI	06/29/23 09:12

Laboratory References:

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



Accreditation/Certification Summary

Client: KPRG and Associates, Inc.
Project/Site: Powerton CCR FAB (MW-01 - CI, FI, SO4)

Job ID: 500-235818-1

Laboratory: Eurofins Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-29-24

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PROJECT NAME	NRG - POWERTON STATION - 12313.1		DATE	5/17/23
Sample Name	MW-01	Start Time	1218	
Condition of Well	good			
Water Level	23.91	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low flow bladder	Purge Characteristics	clear	
Volume Removed	4 gts	WL at Sample Time	23.91	
Method of Sample	Low flow bladder	Sample Characteristics	clear	
Sample Analysis	CCA, CCR (FAB, ABIBASB)	Sample Time	1236	
Water Quality Meter	YSI Pro Dss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
1220	23.91	7.32	17.5	.728	8.77	21.9	6.65
1223	-	7.22	11.6	.625	8.81	30.7	5.05
1226	-	7.22	12.1	.624	8.54	31.5	4.41
1229	-	7.23	11.3	.616	8.42	32.6	4.36
1232	23.91	7.23	11.4	.612	8.26	33.3	4.33

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

KLS

PROJECT NAME	NRG - POWERTON STATION - 12313.1		DATE	5/16/23
Sample Name	MW-02	Start Time	0851	
Condition of Well	good			
Water Level	24.55	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low flow bladder	Purge Characteristics	clear	
Volume Removed	4 gts	WL at Sample Time	24.55	
Method of Sample	Low flow bladder	Sample Characteristics	clear	
Sample Analysis	CCA, CCR(FAB)	Sample Time	0906	
Water Quality Meter	YSI Pro Dss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
0853	24.55	7.72	10.7	.738	10.18	15.7	61.73
0856	-	7.49	10.5	.578	6.82	17.5	71.83
0859	-	7.48	10.5	.576	5.44	19.4	65.89
0902	24.55	7.48	10.5	.576	4.66	21.1	62.49

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

KLS

PROJECT NAME	NRG - POWERTON STATION - 12313.1		DATE	5/16/23
Sample Name	MW-03	Start Time	0939	
Condition of Well	good			
Water Level	23.62	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low flow bladder	Purge Characteristics	clear	
Volume Removed	3.5 gts	WL at Sample Time	23.62	
Method of Sample	Low flow bladder	Sample Characteristics	clear	
Sample Analysis	CCA, CCR (FAB)	Sample Time	0954	
Water Quality Meter	YSI Pro Dss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
0941	23.62	7.74	9.9	.647	10.86	39.5	6.26
0944	-	7.45	9.4	.588	10.92	41.0	7.03
0947	-	7.42	9.2	.586	10.94	41.7	6.90
0950	23.62	7.42	9.3	.585	10.89	41.9	6.94

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

KLS

PROJECT NAME	NRG – POWERTON STATION – 12313.1		DATE	5/16/23
Sample Name	MW-04	Start Time	1031	
Condition of Well	good			
Water Level	24.76	Total Depth	-	
Well Diameter	PVC – 2 inch	Volume in Well	-	
Method of Purge	Low flow bladder	Purge Characteristics	clear	
Volume Removed	3.5 gts	WL at Sample Time	24.76	
Method of Sample	Low flow bladder	Sample Characteristics	clear	
Sample Analysis	CCA, COR (FAB)	Sample Time	1048	
Water Quality Meter	YSI Pro Dss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
1034	24.76	7.26	14.7	.658	8.52	53.7	6.76
1037	-	7.20	14.6	.696	5.82	48.1	4.80
1040	-	7.21	14.6	.696	5.07	46.9	2.67
1043	24.76	7.21	14.6	.696	4.70	46.7	2.50

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

KLS

PROJECT NAME	NRG – POWERTON STATION – 12313.1		DATE	5/16/23
Sample Name	MW-05	Start Time	1129	
Condition of Well	good			
Water Level	22.05	Total Depth	-	
Well Diameter	PVC – 2 inch	Volume in Well	-	
Method of Purge	Low flow bladder	Purge Characteristics	clear	
Volume Removed	3.0 gts	WL at Sample Time	22.07	
Method of Sample	Low flow bladder	Sample Characteristics	clear	
Sample Analysis	CCA, CCR(FAB)	Sample Time	1145	
Water Quality Meter	YSI Pro Dss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
1131	22.05	7.47	14.6	.894	9.17	51.3	2.61
1134	-	7.05	13.8	.894	4.77	55.1	3.02
1137	-	7.04	13.7	.894	3.58	54.6	2.54
1140	22.07	7.04	13.7	.892	2.53	53.5	2.55

SAMPLING NOTES:

Sampler Name and Company:

KPRG and Associates

KLS

PROJECT NAME	NRG - POWERTON STATION - 12313.1		DATE	5/17/23
Sample Name	MW-10	Start Time	0848	
Condition of Well	good			
Water Level	15.91	Total Depth	-	
Well Diameter	PVC - 2 inch	Volume in Well	-	
Method of Purge	Low flow bladder	Purge Characteristics	sl. cloudy, gray	
Volume Removed	5.5 gts	W L at Sample Time	15.91	
Method of Sample	Low flow bladder	Sample Characteristics	sl. cloudy, gray	
Sample Analysis	CCA, CCR (FAB)	Sample Time	0908	
Water Quality Meter	YSI Pro Dss			

Time	Depth to Water (ft)	ph (SU)	Temp (°C)	Spec. Cond (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
0852	15.91	7.33	13.0	.634	9.62	-45.0	6.92
0855	-	7.05	13.5	.748	5.90	-24.4	113.14
0858	-	7.05	13.4	.753	3.88	-13.7	64.92
0901	-	7.06	13.4	.756	3.01	-9.4	42.85
0904	15.91	7.07	13.4	.758	2.30	-5.9	30.70

SAMPLING NOTES:

FAB duplicate

Sampler Name and Company:

KPRG and Associates

KLS