



ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

**FEDERAL CCR COMPLIANCE
ANNUAL GROUNDWATER MONITORING and
CORRECTIVE ACTION REPORT - 2022
FORMER ASH BASIN**

**Midwest Generation, LLC
Powerton Station
13082 E. Manito Rd.
Pekin, IL 61554**

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14665 West Lisbon Road, Suite 1A
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January 31, 2023

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OVERVIEW

Groundwater monitoring requirements in accordance with the Federal Register, Environmental Protection Agency, 40 CFR Parts 257.94 and 257.95, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule dated April 17, 2015 (CCR Rule) and subsequent amendments, have been completed for the ash pond monitoring wells located at the Midwest Generation, LLC (Midwest Generation) Powerton Generating Station. The wells sampled were selected to meet the monitoring requirements of the CCR Rule for the Former Ash Basin (FAB). The monitoring well network around this pond consists of monitoring wells (MW-01 [upgradient], MW-02, MW-03, MW-04, MW-05, and MW-10 [upgradient]) as shown on Figure 1.

This overview of the 2022 groundwater monitoring period is provided in accordance with requirements under Section 257.90(e)(6). Each required item is discussed separately below.

- Section 257.90(e)(6)(i) – At the start of the current monitoring period, the subject CCR unit was operating under the assessment monitoring program outlined in Section 257.95.
- Section 257.90(e)(6)(ii) – At the end of the current monitoring period, the subject CCR unit is operating under the assessment monitoring program outlined in Section 257.95.
- Section 257.90(e)(6)(iii) – The following statistically significant increases (SSIs) above established background for the Appendix III detection monitoring constituents were noted during this monitoring period:
 - MW-02 – boron (3rd and 4th quarters), TDS (3rd quarter)
 - MW-03 – fluoride (4th quarter), TDS (3rd quarter)
 - MW-04 – boron (4th quarter), fluoride (1st and 2nd quarters) , TDS (3rd and 4th quarters)
 - MW-05 – boron (4th quarter), chloride (1st, 3rd and 4th quarters), fluoride, sulfate, and TDS (1st through 3rd quarters)
 - MW-10 (upgradient) – fluoride (4th quarter)

Since a previously completed Appendix III Alternate Source Demonstration (ASD) in February 2020 was unsuccessful and the site was shifted to assessment monitoring under Section 257.95, therefore, completing another ASD for any Appendix III parameters not included in the initial evaluation is not appropriate. As discussed further below, there are no Appendix IV parameter detections above established site-specific Groundwater Protection Standards (GWPSs).

- Section 257.90(e)(6)(iv) – In 2022 there were no confirmed statistically significant levels (SSLs) above established GWPSs for the Appendix IV assessment monitoring constituents for this unit during the subject monitoring period.
- Section 257.90(e)(6)(v) – The subject unit is not under corrective action.
- Section 257.90(e)(6)(vi) – The subject unit is not under corrective action.

1.0 INTRODUCTION

The Assessment Monitoring requirements in accordance with the Federal Register, Environmental Protection Agency, 40 CFR Parts 257.94 and 257.95, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule dated April 17, 2015 (CCR Rule) have been completed for the Former Ash Basin (FAB) monitoring wells located at the Midwest Generation, LLC (Midwest Generation) Powerton Generating Station. With the vacating of Section 257.100(b) through (d) in October 2016, the inactive Former Ash Basin (FAB), which is being planned for closure, was added to the CCR units that would require monitoring under the CCR Rule. Wells MW-02 through MW-05 and MW-10 were added to the CCR sampling program specifically for the FAB and are not part of the monitoring program for the Ash Bypass Basin (ABB) and Ash Surge Basin (ASB). Well MW-01 is also part of the FAB CCR monitoring program also in addition to being part of the CCR monitoring program for the ABB and ASB. Well MW-01 and MW-10 are upgradient wells and wells MW-02 through MW-05 are downgradient wells.

This annual report covers the work performed relative to CCR groundwater monitoring for the FAB during the calendar year 2022. It does not duplicate information or activities previously reported for 2021. It is prepared in accordance with Section 257.90(e)(1-6) and summarizes the sampling procedures used, provides an evaluation of groundwater flow conditions, summarizes the analytical data generated to date and summarizes conclusions and recommendations for the station going forward. The annual report for the ABB and ASB is provided under separate cover.

2.0 FIELD PROCEDURES AND GROUNDWATER FLOW EVALUATION

2.1 Field Procedures

As previously noted, the CCR groundwater monitoring network around the FAB consists of monitoring wells MW-01 (upgradient), MW-02 through MW-05 (downgradient), and MW-10 (upgradient) as shown on Figure 1. As part of sampling procedures, the integrity of all monitoring wells was inspected and water levels were obtained using an electronic water level meter (see summary of water level discussion below). All wells were found in generally good condition.

Groundwater samples were collected using the low-flow sampling technique from dedicated pumps. The samples were not filtered prior to analysis to provide for total metals concentrations as opposed to dissolved metals concentrations. One duplicate sample was collected from a randomly selected monitoring well per sampling event for quality assurance purposes.

2.2 Groundwater Flow Evaluation

Water level data measurements were obtained from each well during each round of groundwater monitoring. A complete round of water levels was collected prior to initiating sampling, and the water level data are summarized in Table 1. Unlike the CCR monitoring network for the ABB/ASB which includes monitoring wells within both a shallow localized clay/silty clay unit and a deeper more extensive sand unit, all wells associated with the FAB monitoring are screened within the extensive sand unit which underlies the area (i.e., the localized shallow clay/silty clay unit does not extend beneath the FAB). Groundwater flow maps from the sampling performed in 2022 relative to the FAB are provided on Figures 2 through 5.

In accordance with general groundwater sampling requirements under Section 257.93(c), Table 2 provides a summary of the flow direction and an estimated rate of groundwater flow for each sampling event. The flow rate was calculated using the following equation:

$$V_s = \frac{Kdh}{n_e dl}, \text{ where}$$

V_s is seepage velocity (distance/time)
 K is hydraulic conductivity (distance/time)
 dh/dl is hydraulic gradient (unitless)
 n_e is effective porosity (unitless)

Through 2020 the average hydraulic conductivity of 3.81×10^{-3} ft/sec (sandy unit) used in Table 2 was obtained from the Hydrogeologic Assessment Report dated February 2011 and prepared by

Patrick Engineering. As part of Illinois EPA State CCR Rule requirements, some groundwater modeling was completed for the Former Ash Basin. The Patrick Engineering slug test data were re-evaluated as part of the modeling exercise and a modified hydraulic geometric mean of 1.39×10^{-3} ft/sec was estimated and subsequently used in Table 2 for 2021 and 2022 estimates. The estimated effective porosity of the sandy materials (0.35) were obtained from literature (Applied Hydrogeology, Fetter, 1980).

3.0 ANALYTICAL DATA AND STATUS OF EVALUATIONS

3.1 Sampling Summary

The groundwater sampling summary from 2022 is provided in Table 3, in accordance with 257.90 (e)(3). Federal CCR assessment monitoring requires groundwater sampling on a minimum semi-annual basis. Analytical data packages are included in Appendix A.

3.2 Data Summary

The analytical data from the FAB assessment monitoring groundwater sampling for Appendix III and IV parameters is provided in Tables 4 and 5, respectively. Table 4 includes Prediction Limits (PLs) for Appendix III parameters that were established as part of the initial CCR Groundwater Monitoring Statistical Evaluation Summary dated December 2019. Table 5 includes GWPSs for detected Appendix IV constituents that were calculated as part of a report titled Statistical Evaluation Summary CCR Groundwater Assessment Monitoring – Former Ash Basin Powerton Generating Station dated June 22, 2020 (for summaries of Appendix III and IV statistical evaluations, see 2019 and 2020 CCR Compliance Reports, respectively). Both tables include the sample dates and whether the specific well is considered upgradient or downgradient relative to groundwater flow and the regulated unit. There were no confirmed SSLs above established site-specific groundwater protection standards (GWPSs) for the Appendix IV assessment monitoring constituents for this unit during the subject monitoring period.

3.3 Current Status

The FAB was transitioned from detection monitoring to assessment monitoring in February 2020 and currently remains in assessment monitoring.

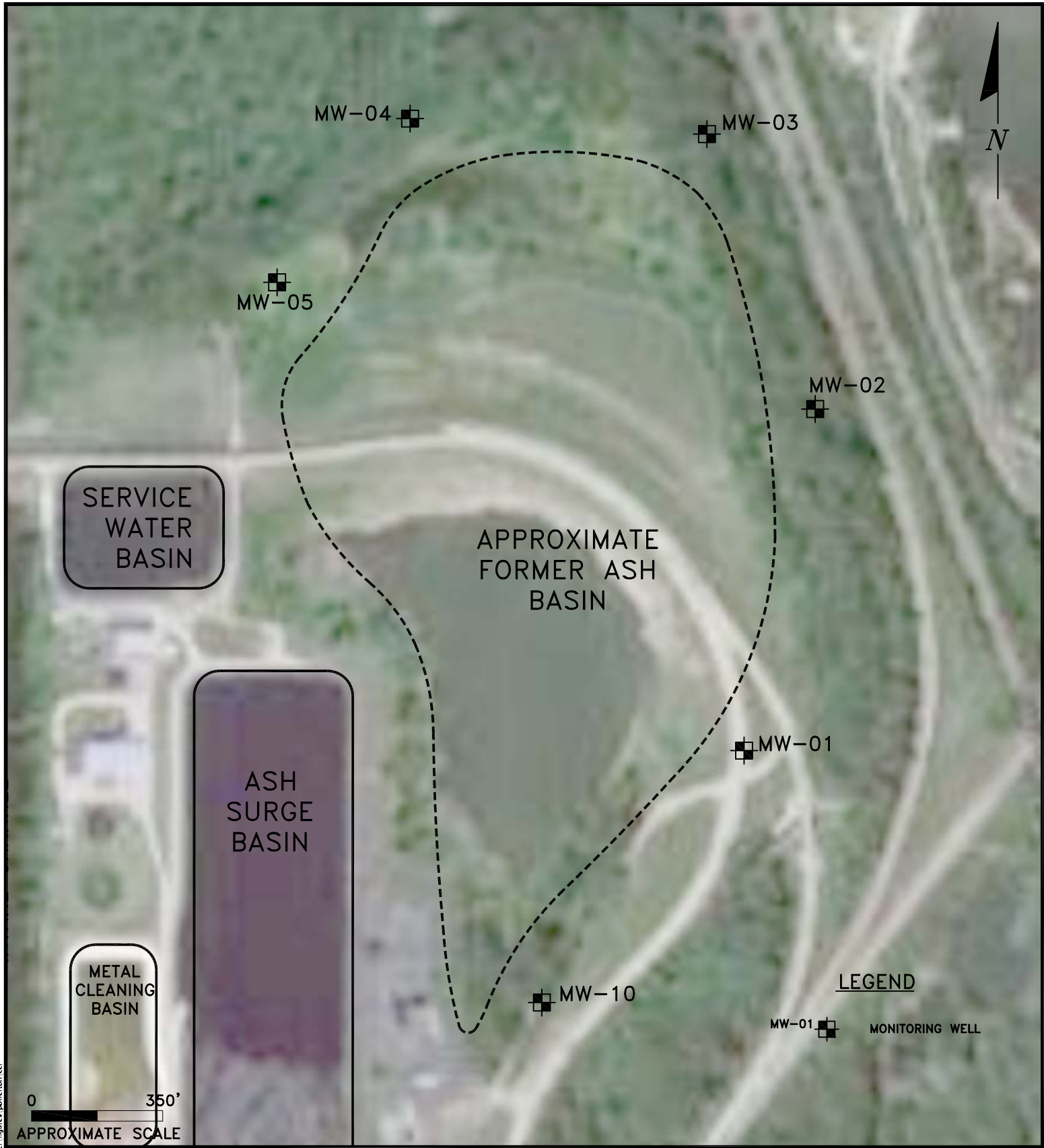
4.0 SUMMARY/CONCLUSIONS AND RECOMMENDATIONS

The assessment monitoring requirements in accordance with the CCR rule are being successfully met. There have been no recorded detections above established GWPSs for any parameter at any well. At this time, it is recommended that the station remain in assessment monitoring in accordance with Section 257.95.

5.0 REFERENCES

- Federal Register, Environmental Protection Agency, 40 CFR Parts 257 and 261, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Final Rule. Vol. 80, No. 74, Friday April 17, 2015.
- Patrick Engineering, Inc., Hydrogeologic Assessment Report – Powerton Generating Station, Pekin, IL. February 2011.
- KPRG and Associates, Inc., CCR Compliance Monitoring, Sampling and Analysis Plan, Midwest Generation, LLC Powerton Generating Station. October 10, 2017.
- KPRG and Associates, Inc., CCR Compliance Statistical Approach for Groundwater Data Evaluation, Midwest Generation, LLC Powerton Generating Station. October 10, 2017.
- KPRG and Associates, Inc., CCR Compliance Annual Groundwater Monitoring and Corrective Action Report – 2019. January 31, 2020.
- KPRG and Associates, Inc., Alternate Source Demonstration CCR Groundwater Monitoring – Former Ash Basin Powerton Generating Station. March 9, 2020.
- KPRG and Associates, Inc., CCR Compliance Statistical Evaluation Summary Groundwater Assessment Monitoring Former Ash Basin Powerton Generating Station. June 22, 2020.
- KPRG and Associates, Inc., CCR Compliance Annual Groundwater Monitoring and Corrective Action Report – 2020. January 31, 2021.
- KPRG and Associates, Inc., CCR Compliance Annual Groundwater Monitoring and Corrective Action Report – 2020. January 31, 2022.
- C.W. Fetter, Jr., Applied Hydrogeology. Charles E. Merrill Publishing Co., 1980.
- R.A. Freeze and J.A. Cherry, Groundwater. Prentice-Hall, Inc. Publishing Co., 1979.

FIGURES



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FORMER ASH BASIN CCR MONITORING WELL SITE MAP

POWERTON STATION
PEKIN, ILLINOIS

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

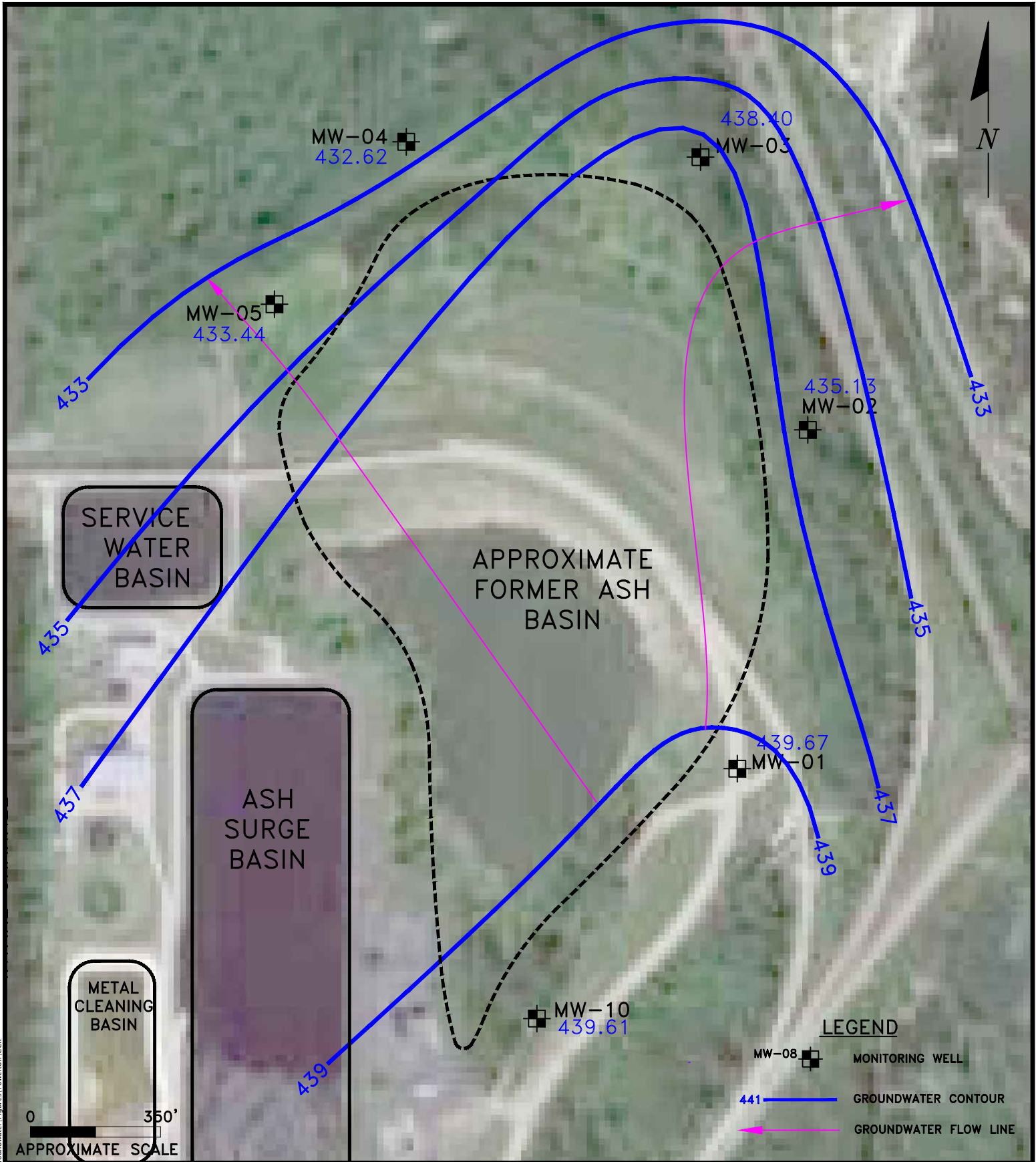
Scale: 1" = 350'

Date: February 10, 2020

14665 West Lisbon Road, Suite 1A Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

KPRG Project No. 12313.1

FIGURE 1



W:\Projects\Midwest\Generation 12313 Ash Pond Groundwater\Figures\Powerton\CCR

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**CCR GROUNDWATER CONTOUR MAP
FORMER ASH BASIN 1Q2022**

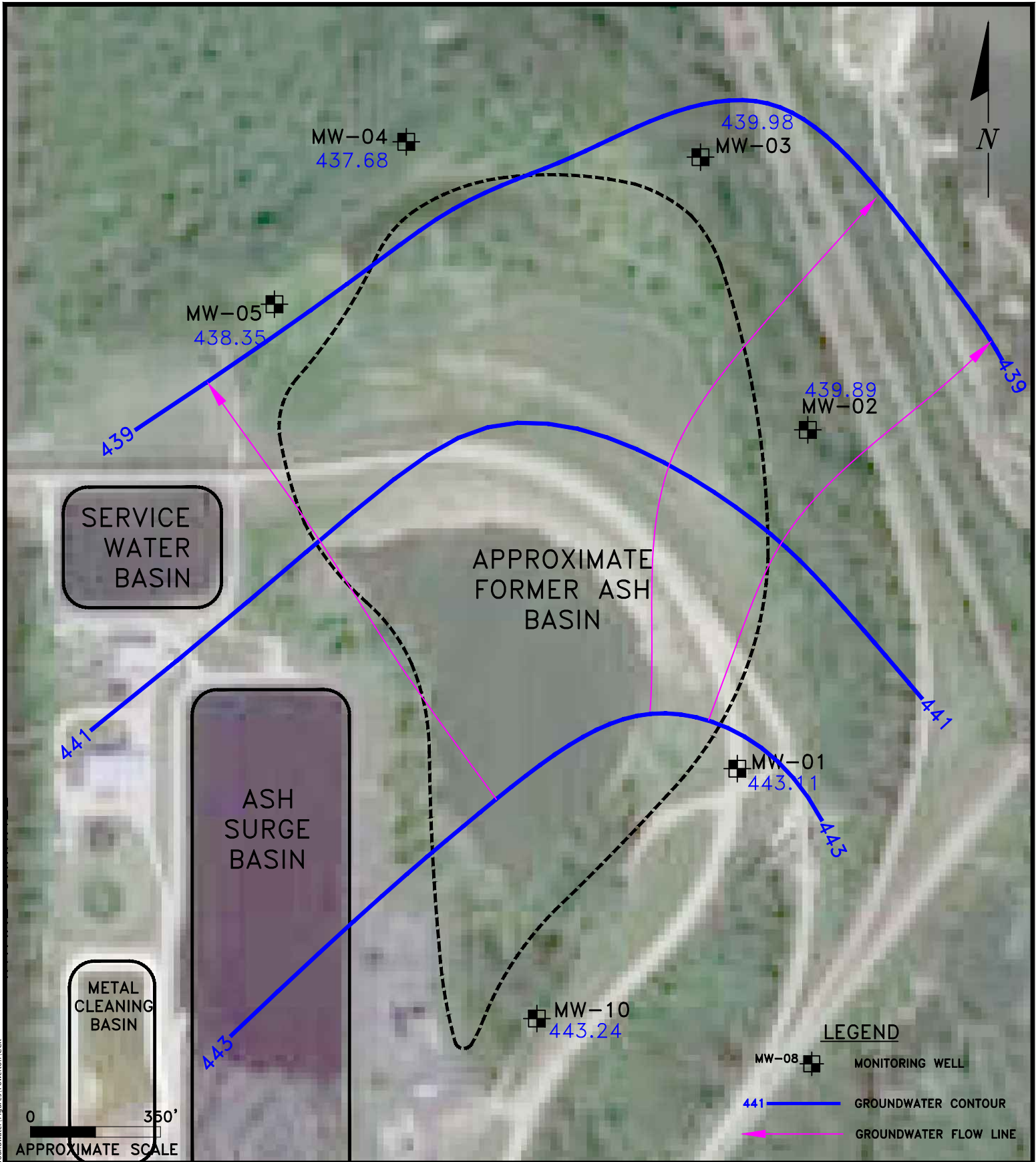
POWERTON STATION
PEKIN, ILLINOIS

Scale: 1" = 350'

Date: January 16, 2023

KPRG Project No. 12313.1

Figure 2



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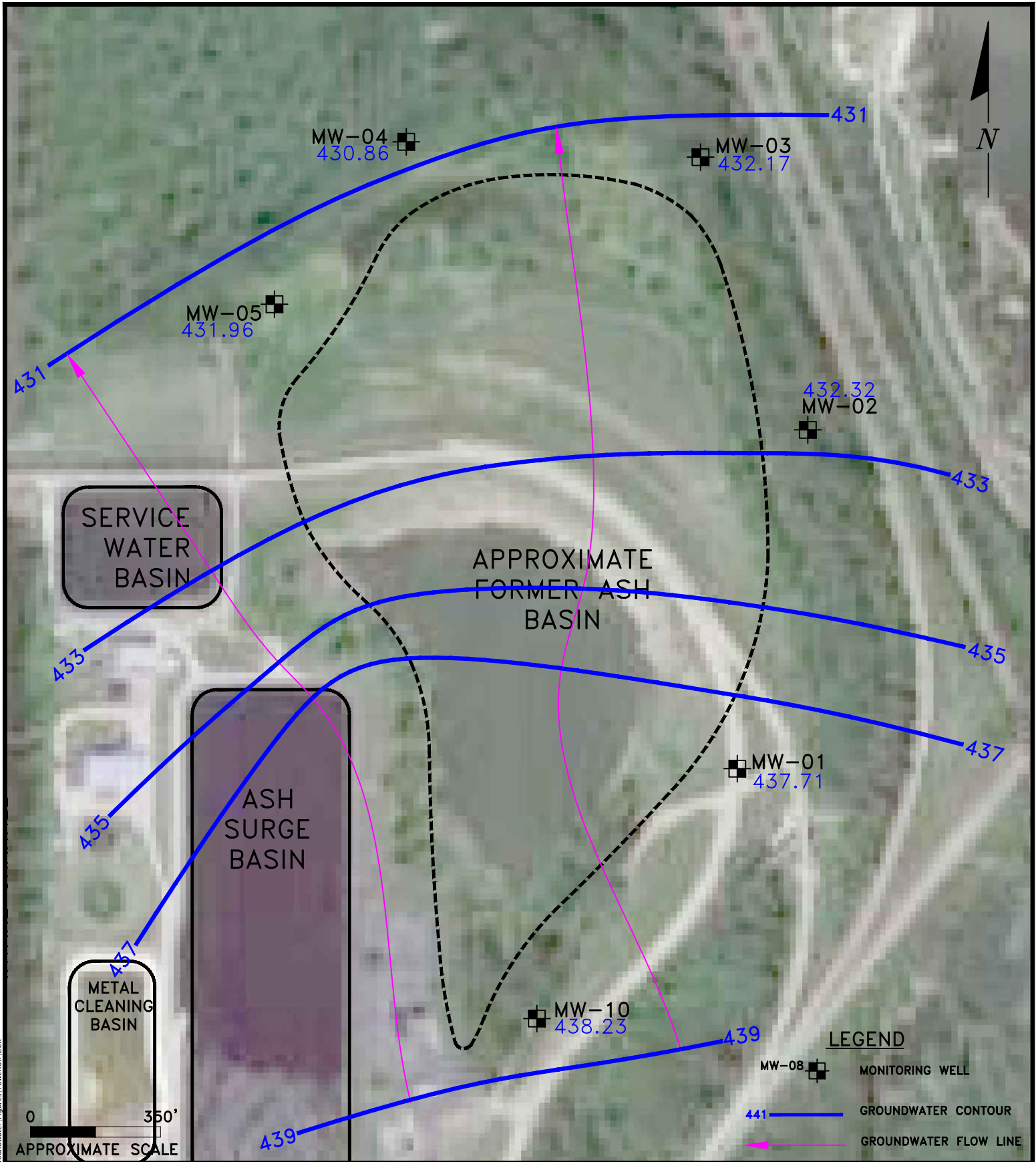
14665 West Lisbon Road, Suite 2B Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

CCR GROUNDWATER CONTOUR MAP
FORMER ASH BASIN 2Q2022

POWERTON STATION
 PEKIN, ILLINOIS

Scale: 1" = 350' Date: January 16, 2023

KPRG Project No. 12313.1 Figure 3



LEGEND

- MW-08 MONITORING WELL
- 441 GROUNDWATER CONTOUR
- GROUNDWATER FLOW LINE

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**CCR GROUNDWATER CONTOUR MAP
FORMER ASH BASIN 3Q2022**

POWERTON STATION
PEKIN, ILLINOIS

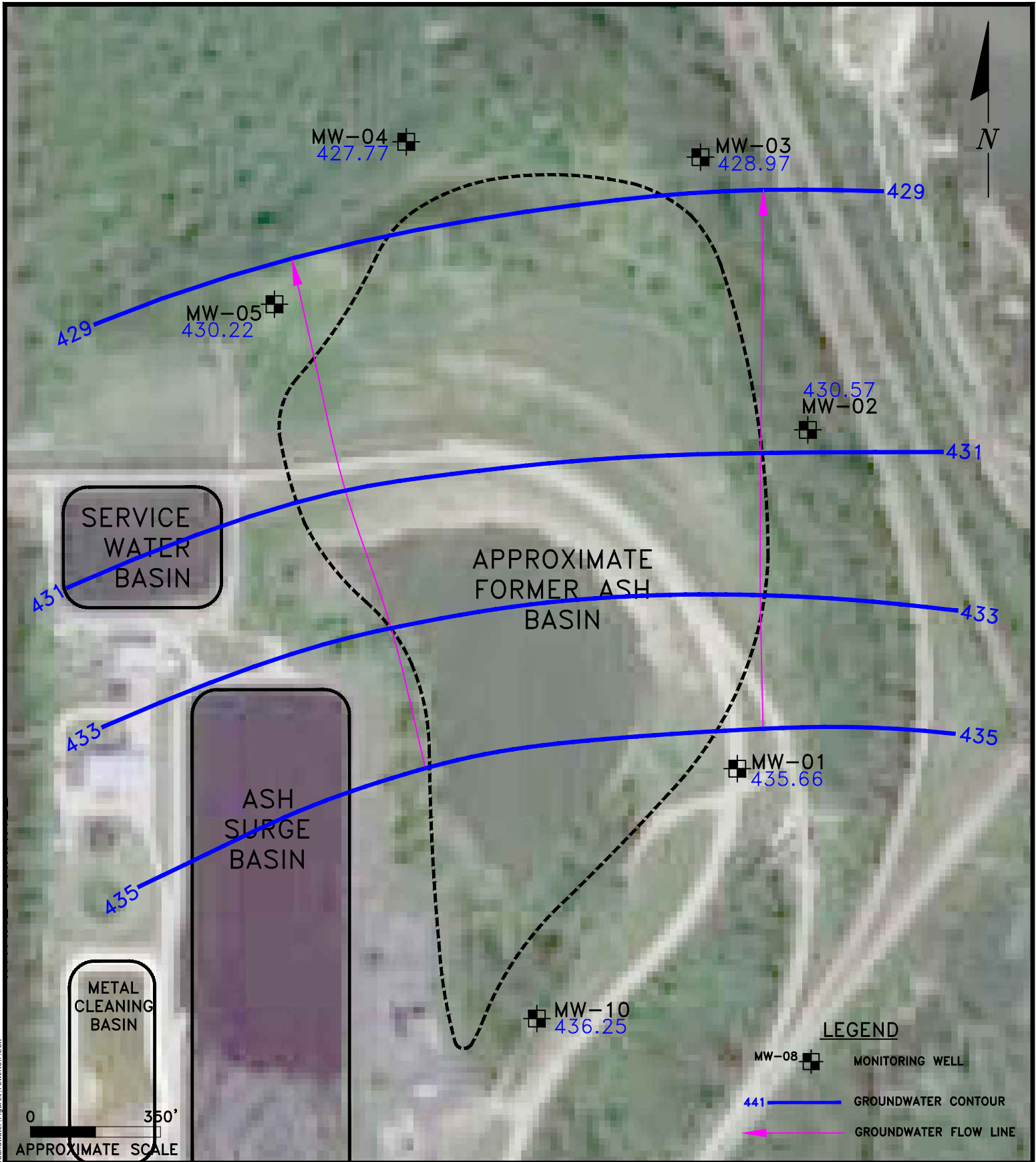
Scale: 1" = 350'

Date: January 18, 2023

KPRG Project No. 12313.1

Figure 4

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**CCR GROUNDWATER CONTOUR MAP
FORMER ASH BASIN 4Q22**

POWERTON STATION
PEKIN, ILLINOIS

Scale: 1" = 350'

Date: January 18, 2023

KPRG Project No. 12313.1

Figure 5

TABLES

Table 1. Groundwater Elevations for FAB Wells- Midwest Generation, LLC, Powerton Station, Pekin, IL

Well ID	Date	Top of Casing Elevation (ft above MSL)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft above MSL)
MW-01	11/16/2015	465.24	26.04	439.20
	2/22/2016	465.24	21.90	443.34
	5/16/2016	465.24	21.83	443.41
	8/15/2016	465.24	23.89	441.35
	11/14/2016	465.24	23.38	441.86
	2/13/2017	465.24	21.71	443.53
	5/1/2017	465.24	18.87	446.37
	6/20/2017	465.24	21.54	443.70
	8/25/2017	465.24	24.70	440.54
	11/8/2017	465.24	24.92	440.32
	5/17/2018	465.24	22.66	442.58
	8/8/2018	465.24	26.05	439.19
	10/30/2018	465.24	24.69	440.55
	2/25/2019	465.24	19.44	445.80
	4/29/2019	465.24	20.15	445.09
	8/26/2019	465.24	23.85	441.39
	2/24/2020	465.24	20.71	444.53
	4/27/2020	465.24	20.90	444.34
	12/7/2020	465.24	25.69	439.55
	2/22/2021	465.24	25.18	440.06
	4/7/2021	465.24	22.20	443.04
	5/10/2021	465.24	23.41	441.83
	6/2/2021	465.24	22.00	443.24
	6/28/2021	465.24	23.18	442.06
	7/19/2021	465.24	20.43	444.81
	8/23/2021	465.24	24.42	440.82
	9/30/2021	465.24	26.89	438.35
	10/27/2021	465.24	24.53	440.71
	11/29/2021	465.24	23.31	441.93
	12/30/2021	465.24	24.31	440.93
	1/6/2022	465.24	24.86	440.38
	2/7/2022	465.24	25.57	439.67
	3/1/2022	465.24	21.96	443.28
4/22/2022	465.24	20.03	445.21	
5/24/2022	465.24	21.37	443.87	
6/6/2022	465.24	22.13	443.11	
7/25/2022	465.24	25.48	439.76	
8/29/2022	465.24	27.53	437.71	
9/28/2022	465.24	28.58	436.66	
10/26/2022	465.24	29.75	435.49	
11/14/2022	465.24	29.58	435.66	
12/28/2022	465.24	26.63	438.61	
MW-02	6/20/2017	462.60	22.04	440.56
	8/23/2017	462.60	28.42	434.18
	11/7/2017	462.60	26.08	436.52
	5/17/2018	462.60	23.26	439.34
	8/7/2018	462.60	29.70	432.90
	10/30/2018	462.60	26.77	435.83
	2/25/2019	462.60	17.02	445.58
	4/29/2019	462.60	19.26	443.34
	8/26/2019	462.60	27.45	435.15
	2/24/2020	462.60	20.35	442.25
	4/27/2020	462.60	20.51	442.09
	12/7/2020	462.60	28.71	433.89
	2/22/2021	462.60	25.90	436.70
	4/7/2021	462.60	21.95	440.65
	5/10/2021	462.60	23.01	439.59
	6/2/2021	462.60	21.74	440.86
	6/28/2021	462.60	22.24	440.36
	7/19/2021	462.60	18.66	443.94
	8/23/2021	462.60	27.95	434.65
	9/30/2021	462.60	30.44	432.16
	10/27/2021	462.60	22.74	439.86
	11/29/2021	462.60	25.57	437.03
	12/30/2021	462.60	25.11	437.49
	1/6/2022	462.60	24.96	437.64
	2/7/2022	462.60	27.47	435.13
	3/1/2022	462.60	18.06	444.54
	4/22/2022	462.60	18.63	443.97
	5/24/2022	462.60	21.44	441.16
	6/6/2022	462.60	21.14	441.46
	7/25/2022	462.60	29.28	433.32
	8/29/2022	462.60	30.28	432.32
	9/28/2022	462.60	31.81	430.79
	10/26/2022	462.60	32.84	429.76
11/14/2022	462.60	32.03	430.57	
12/28/2022	462.60	29.35	433.25	

Table 1. Groundwater Elevations for FAB Wells- Midwest Generation, LLC, Powerton Station, Pekin, IL

Well ID	Date	Top of Casing Elevation (ft above MSL)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft above MSL)
MW-03	6/20/2017	462.48	22.31	440.17
	8/23/2017	462.48	28.18	434.30
	11/7/2017	462.48	25.38	437.10
	5/17/2018	462.48	22.62	439.86
	8/7/2018	462.48	29.17	433.31
	10/30/2018	462.48	24.71	437.77
	2/25/2019	462.48	17.20	445.28
	4/29/2019	462.48	18.85	443.63
	8/26/2019	462.48	27.65	434.83
	2/24/2020	462.48	20.18	442.30
	4/27/2020	462.48	20.43	442.05
	12/7/2020	462.48	28.61	433.87
	2/22/2021	462.48	23.48	439.00
	4/7/2021	462.48	21.73	440.75
	5/10/2021	462.48	22.98	439.50
	6/2/2021	462.48	21.53	440.95
	6/28/2021	462.48	21.98	440.50
	7/19/2021	462.48	18.35	444.13
	8/23/2021	462.48	27.85	434.63
	9/30/2021	462.48	30.32	432.16
	10/27/2021	462.48	22.34	440.14
	11/29/2021	462.48	22.86	439.62
	12/30/2021	462.48	23.14	439.34
	1/6/2022	462.48	23.13	439.34
	2/7/2022	462.48	24.08	438.40
	3/1/2022	462.48	18.92	443.56
	4/22/2022	462.48	17.98	444.50
	5/24/2022	462.48	21.14	441.34
	6/6/2022	462.48	22.50	439.98
	7/25/2022	462.48	29.11	433.37
8/29/2022	462.48	30.31	432.17	
9/28/2022	462.48	32.27	430.21	
10/26/2022	462.48	33.83	428.65	
11/14/2022	462.48	33.51	428.97	
12/28/2022	462.48	30.21	432.27	
MW-04	6/20/2017	460.57	22.15	438.42
	8/28/2017	460.57	28.49	432.08
	11/7/2017	460.57	25.62	434.95
	5/17/2018	460.57	24.13	436.44
	8/7/2018	460.57	29.23	431.34
	10/30/2018	460.57	26.58	433.99
	2/25/2019	460.57	15.45	445.12
	4/29/2019	460.57	15.88	444.69
	8/26/2019	460.57	27.35	433.22
	2/24/2020	460.57	19.81	440.76
	4/27/2020	460.57	19.76	440.81
	12/7/2020	460.57	28.50	432.07
	2/22/2021	460.57	26.44	434.13
	4/7/2021	460.57	21.90	438.67
	5/10/2021	460.57	23.92	436.65
	6/2/2021	460.57	21.41	439.16
	6/28/2021	460.57	22.40	438.17
	7/19/2021	460.57	17.22	443.35
	8/23/2021	460.57	27.81	432.76
	9/30/2021	460.57	30.01	430.56
	10/27/2021	460.57	22.29	438.28
	11/29/2021	460.57	25.83	434.74
	12/30/2021	460.57	25.79	434.78
	1/6/2022	460.57	25.30	435.27
	2/7/2022	460.57	27.95	432.62
	3/1/2022	460.57	16.63	443.94
	4/22/2022	460.57	16.81	443.76
	5/24/2022	460.57	20.89	439.68
	6/6/2022	460.57	22.89	437.68
	7/25/2022	460.57	29.18	431.39
8/29/2022	460.57	29.71	430.86	
9/28/2022	460.57	31.42	429.15	
10/26/2022	460.57	32.38	428.19	
11/14/2022	460.57	32.80	427.77	
12/28/2022	460.57	29.21	431.36	

Table 1. Groundwater Elevations for FAB Wells- Midwest Generation, LLC, Powerton Station, Pekin, IL

Well ID	Date	Top of Casing Elevation (ft above MSL)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft above MSL)
MW-05	11/16/2015	458.58	26.39	432.19
	2/22/2016	458.66	21.12	437.54
	5/16/2016	458.66	16.58	442.08
	8/15/2016	458.66	23.59	435.07
	11/14/2016	458.66	22.72	435.94
	2/13/2017	458.66	19.13	439.53
	5/1/2017	458.66	13.09	445.57
	6/20/2017	458.66	19.43	439.15
	8/28/2017	458.66	25.38	433.20
	11/7/2017	458.66	22.91	435.67
	5/17/2018	458.66	21.54	437.04
	8/7/2018	458.66	26.17	432.41
	10/30/2018	458.66	23.97	434.61
	2/25/2019	458.66	13.21	445.45
	4/29/2019	458.66	15.40	443.26
	8/26/2019	458.66	24.35	434.31
	2/24/2020	458.66	17.25	441.41
	4/27/2020	458.66	17.41	441.25
	12/7/2020	458.66	25.65	433.01
	2/22/2021	458.66	23.82	434.84
	4/7/2021	458.66	19.40	439.26
	5/10/2021	458.66	21.38	437.28
	6/2/2021	458.66	18.99	439.67
	6/28/2021	458.66	22.20	436.46
	7/19/2021	458.66	14.98	443.68
	8/23/2021	458.66	24.85	433.81
	9/30/2021	458.66	26.98	431.68
	10/27/2021	458.66	20.00	438.66
	11/29/2021	458.66	23.13	435.53
	12/30/2021	458.66	23.20	435.46
1/6/2022	458.66	22.80	435.86	
2/7/2022	458.66	25.22	433.44	
3/1/2022	458.66	14.52	444.14	
4/22/2022	458.66	14.59	444.07	
5/24/2022	458.66	18.52	440.34	
6/6/2022	458.66	17.06	441.60	
7/25/2022	458.66	26.02	432.64	
8/29/2022	458.66	26.70	431.96	
9/28/2022	458.66	28.10	430.56	
10/26/2022	458.66	28.96	429.70	
11/14/2022	458.66	28.44	430.22	
12/28/2022	458.66	26.04	432.62	
MW-10	6/22/2017	457.31	13.46	443.85
	8/24/2017	457.31	16.39	440.92
	11/9/2017	457.31	16.86	440.45
	5/16/2018	457.31	14.88	442.43
	8/8/2018	457.31	17.88	439.43
	10/30/2018	457.31	17.04	440.27
	2/25/2019	457.31	11.28	446.03
	4/29/2019	457.31	11.88	445.43
	8/26/2019	457.31	15.89	441.42
	2/24/2020	457.31	12.64	444.67
	4/27/2020	457.31	12.75	444.56
	12/7/2020	457.31	17.80	439.51
	2/22/2021	457.31	17.25	440.06
	4/7/2021	457.31	14.21	443.10
	5/10/2021	457.31	15.58	441.73
	6/2/2021	457.31	13.98	443.33
	6/28/2021	457.31	15.28	442.03
	7/19/2021	457.31	12.30	445.01
	8/23/2021	457.31	16.61	440.70
	9/30/2021	457.31	18.67	438.64
	10/25/2021	457.31	16.23	441.08
	11/29/2021	457.31	15.52	441.79
	12/30/2021	457.31	16.50	440.81
	1/6/2022	457.31	16.82	440.49
	2/7/2022	457.31	17.70	439.61
	3/1/2022	457.31	13.77	443.54
	4/22/2022	457.31	11.80	445.51
	5/24/2022	457.31	13.20	444.11
	6/6/2022	457.31	14.07	443.24
	7/25/2022	457.31	17.53	439.78
8/29/2022	457.31	19.08	438.23	
9/28/2022	457.31	20.16	437.15	
10/26/2022	457.31	21.23	436.08	
11/14/2022	457.31	21.06	436.25	
12/28/2022	457.31	18.71	438.60	

MSL - Mean Sea Level
TOC - Top of Casing

Table 2. Groundwater Flow Direction and Estimated Seepage Velocity/Flow Rate - Powerton Generation Station - Former Ash Basin

DATE	Screened Unit	Groundwater Flow Direction	Kavg (ft/sec)*	Average Hydraulic Gradient (ft/ft)	Porosity (unitless)**	Estimated Seepage Velocity (ft/day)
5/10/2021	Sandy	Northerly (Northwest - Northeast)	1.390E-03	0.0036	0.35	1.24
8/23/2021	Sandy	Northerly (Northwest - Northeast)	1.390E-03	0.0117	0.35	4.01
11/29/2021	Sandy	Northerly (Northwest - Northeast)	1.390E-03	0.0033	0.35	1.13
2/7/2022	Sandy	Northerly (Northwest - Northeast)	1.390E-03	0.0039	0.35	1.34
6/6/2022	Sandy	Northerly (Northwest - Northeast)	1.390E-03	0.0026	0.35	0.89
8/29/2022	Sandy	Northerly (Northwest - Northeast)	1.390E-03	0.0043	0.35	1.48
11/14/2022	Sandy	Northerly (Northwest - Northeast)	1.390E-03	0.0041	0.35	1.41

* Kavg - Pre-2021 K values from Hydrologic Assessment Report, Patrick Engineering, February 2011. 2021 K values from re-evaluation of slug test data as part of groundwater modeling in support of Application for Construction Permit per Illinois State CCR Rule.

** - Porosity estimates from Applied Hydrogeology, Fetter, 1980.

Table 3. CCR Groundwater Sample Collection Summary for 2022 - Powerton Generating Station Former Ash Basin

Well ID	Number of Groundwater Sampling Events	Dates of Groundwater Sampling Events	Detection Monitoring (D) versus Assessment Monitoring (A)
MW-01 (Upgradient)	4	2/9/2022	A
		6/7/2022	A
		8/30/2022	A
		11/15/2022	A
MW-10 (Upgradient)	4	2/9/2022	A
		6/7/2022	A
		8/30/2022	A
		11/15/2022	A
MW-02 (Downgradient)	4	2/8/2022	A
		6/7/2022	A
		8/30/2022	A
		11/14/2022	A
MW-03 (Downgradient)	4	2/8/2022	A
		6/7/2022	A
		8/30/2022	A
		11/14/2022	A
MW-04 (Downgradient)	4	2/8/2022	A
		6/7/2022	A
		8/30/2022	A
		11/14/2022	A
MW-05 (Downgradient)	4	2/8/2022	A
		6/7/2022	A
		8/30/2022	A
		11/14/2022	A

Table 4. Appendix III Groundwater Analytical Results - Midwest Generation, LLC, Powerton Station, Pekin, IL. Former Ash Basin.

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids	
MW-01 up-gradient	11/16/2015	1.0	98	44	0.17	7.07	93	530	
	2/25/2016	0.2	110	42	0.16	7.23	54	460	
	5/20/2016	0.34	100	44	0.17	6.95	65	430	
	8/17/2016	0.27	78	39	0.25	7.16	50	530	
	11/16/2016	0.18	97	39	0.21	7.22	32	500	
	2/14/2017	0.18	120	55	0.17	7.30	60	550	
	5/3/2017	0.19	86	66	0.16	7.41	45	460	
	6/21/2017	0.18	85	58	0.18	7.60	47	540	
	8/25/2017	0.56	86	41	0.18	7.41	63	490	
	11/8/2017	0.57	130	38	0.12	6.69	61	640	
	5/17/2018	0.15	88	50	0.12	6.70	48	540	
	8/8/2018	0.14	86	48	0.13	6.80	43	430	
	4/30/2019	0.07	78	54	0.17	7.20	27	450	
	Pred. Limit*	0.968	130.7	66.4	0.246	7.75-6.52	89	634.4	
	8/26/2019	0.57	100	39	0.13	7.15	71	550	
	2/24/2020	0.28	87	53	0.21	7.19	34	410	
	4/28/2020	0.33	110	46	0.19	7.17	41	470	
	12/7/2020	0.59	100	54	0.25	7.22	55	640	
	5/11/2021	0.21	85	51	0.21	7.52	37	450	
	8/24/2021	0.27	99	40	0.18	7.19	56	430	
	11/30/2021	0.35	84	41	0.19	7.14	^	28	410
	2/9/2022	0.18	96	47	0.17	7.33	48	520	
	6/7/2022	0.21	81	51	0.14	7.62	27	430	
8/30/2022	0.59	92	44	0.15	7.10	66	810		
11/15/2022	0.74	110	47	0.1	7.15	45	530		
MW-10 up-gradient	6/22/2017	0.46	100	48	0.19	6.81	54	1.0	
	8/24/2017	0.32	93	51	0.18	7.14	57	480	
	11/9/2017	0.36	98	48	0.18	6.78	64	500	
	5/16/2018	0.42	93	44	0.19	7.64	80	530	
	8/8/2018	0.39	99	58	0.19	7.10	60	550	
	10/30/2018	0.34	110	49	0.22	7.65	49	510	
	2/26/2019	0.39	150	48	0.21	6.77	36	540	
	5/1/2019	0.35	92	50	0.22	6.81	30	470	
	Pred. Limit*	0.499	150	60	0.241	7.65-6.77	95	598	
	8/26/2019	0.30	84	48	0.19	7.09	30	410	
	2/25/2020	1.40	110	45	0.23	6.82	59	500	
	4/28/2020	1.00	110	41	0.24	6.80	64	550	
	12/8/2020	2.40	120	44	0.26	7.11	71	550	
	5/11/2021	0.64	100	52	0.24	7.01	59	540	
	8/24/2021	0.42	98	53	0.21	6.87	46	420	
	11/30/2021	0.42	100	47	0.19	6.99	^	36	530
	2/9/2022	0.41	94	48	0.22	6.88	50	530	
	6/7/2022	0.43	85	44	0.21	7.09	38	390	
8/30/2022	0.38	92	45	0.22	6.83	38	590		
11/15/2022	0.44	99	49	0.28	7.03	48	470		
MW-02 down-gradient	6/20/2017	0.33	90	55	0.19	7.01	47	500	
	8/23/2017	V	1.30	86	49	0.19	7.40	61	440
	11/7/2017	3.70	98	46	0.17	7.10	88	550	
	5/15/2018	0.22	80	45	0.23	7.71	54	500	
	8/7/2018	1.50	89	54	0.15	7.09	51	530	
	10/30/2018	0.23	86	43	0.17	7.83	34	480	
	2/26/2019	0.07	69	49	0.16	7.82	23	400	
	4/30/2019	0.12	79	48	0.16	7.60	30	440	
	Pred. Limit	0.77	132	62	0.25	7.69-6.54	85	609	
	8/26/2019	0.51	86	50	0.18	7.13	32	400	
	2/24/2020	0.33	89	53	0.20	7.43	37	410	
	4/28/2020	0.33	90	50	0.20	7.32	41	430	
	12/9/2020	0.66	100	41	0.15	7.78	64	430	
	5/11/2021	0.23	79	51	0.21	7.70	37	370	
	8/24/2021	0.63	94	47	0.17	7.31	56	340	
	11/30/2021	0.22	87	41	0.14	7.39	^	36	380
	2/8/2022	0.27	95	47	0.2	7.69	49	550	
	6/7/2022	0.23	86	49	0.16	7.73	32	440	
8/30/2022	1.1	95	45	0.15	7.22	75	690		
11/14/2022	1.6	96	49	0.21	7.14	63	480		

Notes: All units are in mg/l except pH is in standard units.

Bold - Potential statistically significant increase.

V- Serial dilution exceeds control limits.

*- Intrawell Prediction Limit. All others are interwell comparisons.

H- Sample was prepped or analyzed beyond specified holding time

Table 4. Appendix III Groundwater Analytical Results - Midwest Generation, LLC, Powerton Station, Pekin, IL. Former Ash Basin.

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
MW-03 down-gradient	6/20/2017	0.4	76	54	0.29	7.26	49	480
	8/23/2017	0.40	79	52	0.28	7.44	52	430
	11/7/2017	0.31	79	62	0.26	7.04	61	460
	5/15/2018	0.35	87	66	0.27	7.53	77	520
	8/7/2018	0.40	82	67	0.22	6.60	49	500
	10/30/2018	0.20	74	44	0.25	7.84	26	400
	2/26/2019	0.06	74	56	0.24	7.49	25	410
	4/30/2019	0.28	74	49	0.22	7.17	38	390
	Pred. Limit	0.77	132	62	0.25	7.69-6.54	85	609
	8/26/2019	0.31	75	50	0.26	7.17	14	380
	2/24/2020	0.33	87	53	0.22	7.10	65	470
	4/28/2020	0.24	86	46	0.22	7.03	79	410
	12/9/2020	0.86	92	45	0.28	7.46	60	390
	5/11/2021	0.22	75	49	0.21	7.33	38	390
	8/24/2021	0.41	81	46	0.25	7.15	32	310
	11/30/2021	0.3	76	47	0.26	7.20	^ 23	350
	2/8/2022	0.2	94	47	0.21	7.22	50	550
6/7/2022	0.37	79	45	0.22	7.37	47	370	
8/30/2022	0.57	87	50	0.21	7.10	51	710	
11/14/2022	0.42	81	49	0.28	7.23	44	430	
MW-04 down-gradient	6/20/2017	0.5	77	55	0.29	7.45	53	480
	8/28/2017	V 0.73	90	89	0.33	7.13	110	680
	11/7/2017	0.60	110	94	0.24	6.80	130	650
	5/15/2018	0.68	87	66	0.27	7.63	100	630
	8/7/2018	0.79	84	71	0.32	6.72	49	510
	10/30/2018	0.54	100	80	0.24	7.55	91	690
	2/26/2019	0.38	79	55	0.25	7.18	52	490
	4/30/2019	0.36	74	48	0.25	7.08	35	380
	Pred. Limit	0.77	132	62	0.25	7.69-6.54	85	609
	8/26/2019	0.64	91	60	0.24	7.08	14	490
	2/24/2020	0.34	81	49	0.20	7.05	67	440
	4/28/2020	0.55	76	52	0.27	7.03	47	380
	12/9/2020	0.57	92	88	0.32	7.10	94	580
	5/11/2021	0.61	77	44	0.33	7.22	76	410
	8/24/2021	0.72	78	48	0.34	7.12	15	100
	11/30/2021	0.51	99	56	0.25	6.95	^ 62	560
	2/8/2022	0.47	88	59	0.29	7.15	52	580
6/7/2022	0.48	73	43	0.3	7.31	30	320	
8/30/2022	0.67	94	61	0.21	6.80	67	720	
11/14/2022	0.84	110	62	0.2	6.85	41	570	
MW-05 down-gradient	5/17/2016	0.70	100	85	0.35	7.08	120	660
	8/16/2016	0.69	110	97	0.30	6.85	150	830
	11/15/2016	0.93	94	66	0.23	6.96	77	620
	2/14/2017	0.79	100	100	0.25	7.25	170	760
	5/1/2017	0.70	100	92	0.28	7.60	170	710
	6/20/2017	0.64	89	63	0.28	7.32	78	550
	8/28/2017	0.62	110	120	0.33	7.05	210	870
	11/7/2017	0.51	99	110	0.31	6.87	160	990
	5/15/2018	0.61	130	89	0.29	7.70	210	910
	8/7/2018	0.49	110	120	0.32	6.56	180	890
	4/30/2019	0.56	84	73	0.36	6.96	120	590
	Pred. Limit	0.77	132	62	0.25	7.69-6.54	85	609
	8/26/2019	0.57	110	75	0.29	7.01	110	660
	2/24/2020	0.54	110	70	0.36	6.90	120	700
	4/28/2020	0.49	110	56	0.37	6.87	130	620
	12/9/2020	0.53	98	78	0.31	6.91	110	670
	5/11/2021	0.50	83	52	0.38	7.20	100	530
8/24/2021	0.55	88	69	0.32	6.84	99	500	
11/30/2021	0.68	99	67	0.3	6.92	^ 92	620	
2/8/2022	0.56	88	68	0.36	6.95	91	650	
6/7/2022	0.59	110	58	0.27	7.15	120	650	
8/30/2022	0.69	79	73	0.38	6.94	86	720	
11/14/2022	1.1	96	64	0.29	6.87	93	600	

Notes: All units are in mg/l except pH is in standard units.

Bold - Potential statistically significant increase.

V- Serial dilution exceeds control limits.

*- Intrawell Prediction Limit. All others are interwell comparisons.

H- Sample was prepped or analyzed beyond specified holding time

APPENDIX A

Analytical Data Packages from 2022 Assessment Monitoring

ANALYTICAL REPORT

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

Laboratory Job ID: 500-212085-1
Client Project/Site: Powerton CCR

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

Attn: Richard Gnat



Authorized for release by:
3/3/2022 11:06:48 AM
Robin Kintz, Project Manager II
(708)534-5200
Robin.Kintz@Eurofinset.com

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

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

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



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Case Narrative

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

Job ID: 500-212085-1

Job ID: 500-212085-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-212085-1

Comments

No additional comments.

Receipt

The samples were received on 2/9/2022 4:05 PM. 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 0.8° C and 2.1° C.

Metals

Method 3005A: Elevated reporting limits are provided for the following sample due to insufficient sample provided for <CHOOSE_ONE> preparation/analysis: MW-2 (500-212085-1).

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

General Chemistry

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

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Method Summary

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

Job ID: 500-212085-1

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

Protocol References:

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

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

Laboratory References:

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

Sample Summary

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

Job ID: 500-212085-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-212085-1	MW-2	Water	02/08/22 12:56	02/09/22 16:05
500-212085-2	MW-3	Water	02/08/22 14:29	02/09/22 16:05
500-212085-3	MW-4	Water	02/08/22 15:12	02/09/22 16:05
500-212085-4	MW-5	Water	02/08/22 16:17	02/09/22 16:05
500-212085-5	Duplicate	Water	02/08/22 00:00	02/09/22 16:05
500-212085-6	MW-01	Water	02/09/22 15:02	02/10/22 13:55
500-212085-7	MW-10	Water	02/09/22 13:50	02/10/22 13:55

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Client Sample Results

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

Job ID: 500-212085-1

Client Sample ID: MW-2

Lab Sample ID: 500-212085-1

Date Collected: 02/08/22 12:56

Matrix: Water

Date Received: 02/09/22 16:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/18/22 10:48	02/18/22 23:57	1
Arsenic	0.0017		0.0010		mg/L		02/18/22 10:48	02/18/22 23:57	1
Barium	0.054		0.0025		mg/L		02/18/22 10:48	02/18/22 23:57	1
Beryllium	<0.0010		0.0010		mg/L		02/18/22 10:48	02/18/22 23:57	1
Boron	0.27		0.050		mg/L		02/18/22 10:48	02/23/22 11:59	1
Cadmium	<0.00050		0.00050		mg/L		02/18/22 10:48	02/18/22 23:57	1
Calcium	95		0.20		mg/L		02/18/22 10:48	02/18/22 23:57	1
Chromium	<0.0050		0.0050		mg/L		02/18/22 10:48	02/18/22 23:57	1
Cobalt	<0.0010		0.0010		mg/L		02/18/22 10:48	02/18/22 23:57	1
Lead	<0.00050		0.00050		mg/L		02/18/22 10:48	02/18/22 23:57	1
Lithium	0.0025		0.0020		mg/L		02/18/22 10:48	02/18/22 23:57	1
Molybdenum	0.0076		0.0050		mg/L		02/18/22 10:48	02/18/22 23:57	1
Selenium	<0.0025		0.0025		mg/L		02/18/22 10:48	02/18/22 23:57	1
Thallium	<0.0020		0.0020		mg/L		02/18/22 10:48	02/18/22 23:57	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/14/22 15:50	02/15/22 08:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	550		10		mg/L			02/10/22 07:17	1
Chloride	47		4.0		mg/L			03/02/22 14:51	2
Fluoride	0.20		0.10		mg/L			02/15/22 17:03	1
Sulfate	49		5.0		mg/L			03/02/22 17:13	1

Client Sample Results

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

Job ID: 500-212085-1

Client Sample ID: MW-3

Lab Sample ID: 500-212085-2

Date Collected: 02/08/22 14:29

Matrix: Water

Date Received: 02/09/22 16:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/18/22 10:48	02/19/22 00:15	1
Arsenic	0.0010		0.0010		mg/L		02/18/22 10:48	02/19/22 00:15	1
Barium	0.058		0.0025		mg/L		02/18/22 10:48	02/19/22 00:15	1
Beryllium	<0.0010		0.0010		mg/L		02/18/22 10:48	02/19/22 00:15	1
Boron	0.20		0.050		mg/L		02/18/22 10:48	02/21/22 14:30	1
Cadmium	<0.00050		0.00050		mg/L		02/18/22 10:48	02/19/22 00:15	1
Calcium	94		0.20		mg/L		02/18/22 10:48	02/19/22 00:15	1
Chromium	<0.0050		0.0050		mg/L		02/18/22 10:48	02/19/22 00:15	1
Cobalt	<0.0010		0.0010		mg/L		02/18/22 10:48	02/19/22 00:15	1
Lead	<0.00050		0.00050		mg/L		02/18/22 10:48	02/19/22 00:15	1
Lithium	0.0030		0.0020		mg/L		02/18/22 10:48	02/19/22 00:15	1
Molybdenum	<0.0050		0.0050		mg/L		02/18/22 10:48	02/19/22 00:15	1
Selenium	<0.0025		0.0025		mg/L		02/18/22 10:48	02/19/22 00:15	1
Thallium	<0.0020		0.0020		mg/L		02/18/22 10:48	02/19/22 00:15	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/11/22 14:50	02/14/22 09:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	550		10		mg/L			02/10/22 07:19	1
Chloride	47		2.0		mg/L			03/02/22 14:35	1
Fluoride	0.21		0.10		mg/L			02/15/22 17:16	1
Sulfate	50		10		mg/L			03/02/22 17:15	2

Client Sample Results

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

Job ID: 500-212085-1

Client Sample ID: MW-4

Lab Sample ID: 500-212085-3

Date Collected: 02/08/22 15:12

Matrix: Water

Date Received: 02/09/22 16:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/18/22 10:48	02/19/22 00:18	1
Arsenic	<0.0010		0.0010		mg/L		02/18/22 10:48	02/19/22 00:18	1
Barium	0.030		0.0025		mg/L		02/18/22 10:48	02/19/22 00:18	1
Beryllium	<0.0010		0.0010		mg/L		02/18/22 10:48	02/19/22 00:18	1
Boron	0.47		0.050		mg/L		02/18/22 10:48	02/21/22 14:33	1
Cadmium	<0.00050		0.00050		mg/L		02/18/22 10:48	02/19/22 00:18	1
Calcium	88		0.20		mg/L		02/18/22 10:48	02/19/22 00:18	1
Chromium	<0.0050		0.0050		mg/L		02/18/22 10:48	02/19/22 00:18	1
Cobalt	<0.0010		0.0010		mg/L		02/18/22 10:48	02/19/22 00:18	1
Lead	<0.00050		0.00050		mg/L		02/18/22 10:48	02/19/22 00:18	1
Lithium	0.0038		0.0020		mg/L		02/18/22 10:48	02/19/22 00:18	1
Molybdenum	0.0060		0.0050		mg/L		02/18/22 10:48	02/19/22 00:18	1
Selenium	<0.0025		0.0025		mg/L		02/18/22 10:48	02/19/22 00:18	1
Thallium	<0.0020		0.0020		mg/L		02/18/22 10:48	02/19/22 00:18	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/14/22 15:50	02/15/22 08:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	580		10		mg/L			02/10/22 07:22	1
Chloride	59		4.0		mg/L			03/02/22 14:51	2
Fluoride	0.29		0.10		mg/L			02/15/22 17:22	1
Sulfate	52		10		mg/L			03/02/22 17:15	2

Client Sample Results

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

Job ID: 500-212085-1

Client Sample ID: MW-5

Lab Sample ID: 500-212085-4

Date Collected: 02/08/22 16:17

Matrix: Water

Date Received: 02/09/22 16:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/18/22 10:48	02/19/22 00:22	1
Arsenic	<0.0010		0.0010		mg/L		02/18/22 10:48	02/19/22 00:22	1
Barium	0.043		0.0025		mg/L		02/18/22 10:48	02/19/22 00:22	1
Beryllium	<0.0010		0.0010		mg/L		02/18/22 10:48	02/19/22 00:22	1
Boron	0.56		0.050		mg/L		02/18/22 10:48	02/21/22 14:37	1
Cadmium	0.00066		0.00050		mg/L		02/18/22 10:48	02/19/22 00:22	1
Calcium	88		0.20		mg/L		02/18/22 10:48	02/19/22 00:22	1
Chromium	<0.0050		0.0050		mg/L		02/18/22 10:48	02/19/22 00:22	1
Cobalt	0.0023		0.0010		mg/L		02/18/22 10:48	02/19/22 00:22	1
Lead	0.0017		0.00050		mg/L		02/18/22 10:48	02/19/22 00:22	1
Lithium	0.0051		0.0020		mg/L		02/18/22 10:48	02/19/22 00:22	1
Molybdenum	0.0070		0.0050		mg/L		02/18/22 10:48	02/19/22 00:22	1
Selenium	<0.0025		0.0025		mg/L		02/18/22 10:48	02/19/22 00:22	1
Thallium	<0.0020		0.0020		mg/L		02/18/22 10:48	02/19/22 00:22	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/14/22 15:50	02/15/22 08:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	650		10		mg/L			02/10/22 07:24	1
Chloride	68		4.0		mg/L			03/02/22 14:51	2
Fluoride	0.36		0.10		mg/L			02/15/22 17:26	1
Sulfate	91		10		mg/L			03/02/22 17:07	2

Client Sample Results

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

Job ID: 500-212085-1

Client Sample ID: Duplicate

Lab Sample ID: 500-212085-5

Date Collected: 02/08/22 00:00

Matrix: Water

Date Received: 02/09/22 16:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/18/22 10:52	02/18/22 20:52	1
Arsenic	<0.0010		0.0010		mg/L		02/18/22 10:52	02/18/22 20:52	1
Barium	0.037		0.0025		mg/L		02/18/22 10:52	02/18/22 20:52	1
Beryllium	<0.0010		0.0010		mg/L		02/18/22 10:52	02/18/22 20:52	1
Boron	0.56		0.050		mg/L		02/18/22 10:52	02/21/22 16:37	1
Cadmium	<0.00050		0.00050		mg/L		02/18/22 10:52	02/18/22 20:52	1
Calcium	86		0.20		mg/L		02/18/22 10:52	02/18/22 20:52	1
Chromium	<0.0050		0.0050		mg/L		02/18/22 10:52	02/18/22 20:52	1
Cobalt	<0.0010		0.0010		mg/L		02/18/22 10:52	02/18/22 20:52	1
Lead	<0.00050		0.00050		mg/L		02/18/22 10:52	02/18/22 20:52	1
Lithium	0.0043		0.0020		mg/L		02/18/22 10:52	02/18/22 20:52	1
Molybdenum	0.0061		0.0050		mg/L		02/18/22 10:52	02/18/22 20:52	1
Selenium	<0.0025		0.0025		mg/L		02/18/22 10:52	02/18/22 20:52	1
Thallium	<0.0020		0.0020		mg/L		02/18/22 10:52	02/18/22 20:52	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/14/22 15:50	02/15/22 08:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	620		10		mg/L			02/10/22 07:27	1
Chloride	68		4.0		mg/L			03/02/22 14:52	2
Fluoride	0.36		0.10		mg/L			02/22/22 12:00	1
Sulfate	91		10		mg/L			03/02/22 17:08	2

Client Sample Results

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

Job ID: 500-212085-1

Client Sample ID: MW-01

Lab Sample ID: 500-212085-6

Date Collected: 02/09/22 15:02

Matrix: Water

Date Received: 02/10/22 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/18/22 10:52	02/18/22 20:55	1
Arsenic	0.0017		0.0010		mg/L		02/18/22 10:52	02/18/22 20:55	1
Barium	0.052		0.0025		mg/L		02/18/22 10:52	02/18/22 20:55	1
Beryllium	<0.0010		0.0010		mg/L		02/18/22 10:52	02/18/22 20:55	1
Boron	0.18		0.050		mg/L		02/18/22 10:52	02/21/22 16:40	1
Cadmium	<0.00050		0.00050		mg/L		02/18/22 10:52	02/18/22 20:55	1
Calcium	96		0.20		mg/L		02/18/22 10:52	02/18/22 20:55	1
Chromium	<0.0050		0.0050		mg/L		02/18/22 10:52	02/18/22 20:55	1
Cobalt	<0.0010		0.0010		mg/L		02/18/22 10:52	02/18/22 20:55	1
Lead	0.0012		0.00050		mg/L		02/18/22 10:52	02/18/22 20:55	1
Lithium	0.0030		0.0020		mg/L		02/18/22 10:52	02/18/22 20:55	1
Molybdenum	0.0074		0.0050		mg/L		02/18/22 10:52	02/18/22 20:55	1
Selenium	<0.0025		0.0025		mg/L		02/18/22 10:52	02/18/22 20:55	1
Thallium	<0.0020		0.0020		mg/L		02/18/22 10:52	02/18/22 20:55	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/14/22 15:50	02/15/22 08:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	520		10		mg/L			02/11/22 06:21	1
Chloride	47		4.0		mg/L			03/02/22 14:52	2
Fluoride	0.17		0.10		mg/L			02/22/22 12:04	1
Sulfate	48		5.0		mg/L			03/02/22 17:07	1

Client Sample Results

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

Job ID: 500-212085-1

Client Sample ID: MW-10

Lab Sample ID: 500-212085-7

Date Collected: 02/09/22 13:50

Matrix: Water

Date Received: 02/10/22 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/18/22 10:52	02/18/22 20:58	1
Arsenic	0.011		0.0010		mg/L		02/18/22 10:52	02/18/22 20:58	1
Barium	0.60		0.0025		mg/L		02/18/22 10:52	02/18/22 20:58	1
Beryllium	<0.0010		0.0010		mg/L		02/18/22 10:52	02/18/22 20:58	1
Boron	0.41		0.050		mg/L		02/18/22 10:52	02/21/22 16:44	1
Cadmium	0.00064		0.00050		mg/L		02/18/22 10:52	02/18/22 20:58	1
Calcium	94		0.20		mg/L		02/18/22 10:52	02/18/22 20:58	1
Chromium	0.026		0.0050		mg/L		02/18/22 10:52	02/18/22 20:58	1
Cobalt	0.054		0.0010		mg/L		02/18/22 10:52	02/18/22 20:58	1
Lead	0.021		0.00050		mg/L		02/18/22 10:52	02/18/22 20:58	1
Lithium	0.011		0.0020		mg/L		02/18/22 10:52	02/18/22 20:58	1
Molybdenum	<0.0050		0.0050		mg/L		02/18/22 10:52	02/18/22 20:58	1
Selenium	0.0045		0.0025		mg/L		02/18/22 10:52	02/18/22 20:58	1
Thallium	<0.0020		0.0020		mg/L		02/18/22 10:52	02/18/22 20:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/14/22 15:50	02/15/22 08:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	530		10		mg/L			02/11/22 06:23	1
Chloride	48		4.0		mg/L			03/02/22 14:52	2
Fluoride	0.22		0.10		mg/L			02/22/22 12:08	1
Sulfate	50		10		mg/L			03/02/22 17:08	2

Definitions/Glossary

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

Job ID: 500-212085-1

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

Job ID: 500-212085-1

Metals

Prep Batch: 642080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-2	MW-3	Total/NA	Water	7470A	
MB 500-642080/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-642080/23-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 642359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-2	MW-3	Total/NA	Water	7470A	642080
MB 500-642080/12-A	Method Blank	Total/NA	Water	7470A	642080
LCS 500-642080/23-A	Lab Control Sample	Total/NA	Water	7470A	642080

Prep Batch: 642384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-1	MW-2	Total/NA	Water	7470A	
500-212085-3	MW-4	Total/NA	Water	7470A	
500-212085-4	MW-5	Total/NA	Water	7470A	
500-212085-5	Duplicate	Total/NA	Water	7470A	
500-212085-6	MW-01	Total/NA	Water	7470A	
500-212085-7	MW-10	Total/NA	Water	7470A	
MB 500-642384/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-642384/13-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 642545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-1	MW-2	Total/NA	Water	7470A	642384
500-212085-3	MW-4	Total/NA	Water	7470A	642384
500-212085-4	MW-5	Total/NA	Water	7470A	642384
500-212085-5	Duplicate	Total/NA	Water	7470A	642384
500-212085-6	MW-01	Total/NA	Water	7470A	642384
500-212085-7	MW-10	Total/NA	Water	7470A	642384
MB 500-642384/12-A	Method Blank	Total/NA	Water	7470A	642384
LCS 500-642384/13-A	Lab Control Sample	Total/NA	Water	7470A	642384

Prep Batch: 643201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-1	MW-2	Total Recoverable	Water	3005A	
500-212085-2	MW-3	Total Recoverable	Water	3005A	
500-212085-3	MW-4	Total Recoverable	Water	3005A	
500-212085-4	MW-5	Total Recoverable	Water	3005A	
MB 500-643201/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-643201/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 643202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-5	Duplicate	Total Recoverable	Water	3005A	
500-212085-6	MW-01	Total Recoverable	Water	3005A	
500-212085-7	MW-10	Total Recoverable	Water	3005A	
MB 500-643202/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-643202/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

QC Association Summary

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

Job ID: 500-212085-1

Metals

Analysis Batch: 643537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-1	MW-2	Total Recoverable	Water	6020A	643201
500-212085-2	MW-3	Total Recoverable	Water	6020A	643201
500-212085-3	MW-4	Total Recoverable	Water	6020A	643201
500-212085-4	MW-5	Total Recoverable	Water	6020A	643201
500-212085-5	Duplicate	Total Recoverable	Water	6020A	643202
500-212085-6	MW-01	Total Recoverable	Water	6020A	643202
500-212085-7	MW-10	Total Recoverable	Water	6020A	643202
MB 500-643201/1-A	Method Blank	Total Recoverable	Water	6020A	643201
MB 500-643202/1-A	Method Blank	Total Recoverable	Water	6020A	643202
LCS 500-643201/2-A	Lab Control Sample	Total Recoverable	Water	6020A	643201
LCS 500-643202/2-A	Lab Control Sample	Total Recoverable	Water	6020A	643202

Analysis Batch: 643796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-2	MW-3	Total Recoverable	Water	6020A	643201
500-212085-3	MW-4	Total Recoverable	Water	6020A	643201
500-212085-4	MW-5	Total Recoverable	Water	6020A	643201
500-212085-5	Duplicate	Total Recoverable	Water	6020A	643202
500-212085-6	MW-01	Total Recoverable	Water	6020A	643202
500-212085-7	MW-10	Total Recoverable	Water	6020A	643202
MB 500-643201/1-A	Method Blank	Total Recoverable	Water	6020A	643201
MB 500-643202/1-A	Method Blank	Total Recoverable	Water	6020A	643202
LCS 500-643201/2-A	Lab Control Sample	Total Recoverable	Water	6020A	643201
LCS 500-643202/2-A	Lab Control Sample	Total Recoverable	Water	6020A	643202

Analysis Batch: 644255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-1	MW-2	Total Recoverable	Water	6020A	643201

General Chemistry

Analysis Batch: 641701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-1	MW-2	Total/NA	Water	SM 2540C	
500-212085-2	MW-3	Total/NA	Water	SM 2540C	
500-212085-3	MW-4	Total/NA	Water	SM 2540C	
500-212085-4	MW-5	Total/NA	Water	SM 2540C	
500-212085-5	Duplicate	Total/NA	Water	SM 2540C	
MB 500-641701/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-641701/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 641916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-6	MW-01	Total/NA	Water	SM 2540C	
500-212085-7	MW-10	Total/NA	Water	SM 2540C	
MB 500-641916/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-641916/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 642706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-1	MW-2	Total/NA	Water	SM 4500 F C	

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QC Association Summary

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

Job ID: 500-212085-1

General Chemistry (Continued)

Analysis Batch: 642706 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-2	MW-3	Total/NA	Water	SM 4500 F C	
500-212085-3	MW-4	Total/NA	Water	SM 4500 F C	
500-212085-4	MW-5	Total/NA	Water	SM 4500 F C	
MB 500-642706/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-642706/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-212085-1 MS	MW-2	Total/NA	Water	SM 4500 F C	
500-212085-1 MSD	MW-2	Total/NA	Water	SM 4500 F C	

Analysis Batch: 643855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-5	Duplicate	Total/NA	Water	SM 4500 F C	
500-212085-6	MW-01	Total/NA	Water	SM 4500 F C	
500-212085-7	MW-10	Total/NA	Water	SM 4500 F C	
MB 500-643855/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-643855/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 645327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-1	MW-2	Total/NA	Water	SM 4500 Cl- E	
500-212085-2	MW-3	Total/NA	Water	SM 4500 Cl- E	
500-212085-3	MW-4	Total/NA	Water	SM 4500 Cl- E	
500-212085-4	MW-5	Total/NA	Water	SM 4500 Cl- E	
500-212085-5	Duplicate	Total/NA	Water	SM 4500 Cl- E	
500-212085-6	MW-01	Total/NA	Water	SM 4500 Cl- E	
500-212085-7	MW-10	Total/NA	Water	SM 4500 Cl- E	
MB 500-645327/16	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-645327/17	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 645387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-1	MW-2	Total/NA	Water	SM 4500 SO4 E	
500-212085-2	MW-3	Total/NA	Water	SM 4500 SO4 E	
500-212085-3	MW-4	Total/NA	Water	SM 4500 SO4 E	
500-212085-4	MW-5	Total/NA	Water	SM 4500 SO4 E	
500-212085-5	Duplicate	Total/NA	Water	SM 4500 SO4 E	
500-212085-6	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-212085-7	MW-10	Total/NA	Water	SM 4500 SO4 E	
MB 500-645387/32	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-645387/34	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

QC Sample Results

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

Job ID: 500-212085-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-643201/1-A
Matrix: Water
Analysis Batch: 643537

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 643201

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0030		0.0030		mg/L		02/18/22 10:48	02/18/22 23:50	1
Arsenic	<0.0010		0.0010		mg/L		02/18/22 10:48	02/18/22 23:50	1
Barium	<0.0025		0.0025		mg/L		02/18/22 10:48	02/18/22 23:50	1
Beryllium	<0.0010		0.0010		mg/L		02/18/22 10:48	02/18/22 23:50	1
Cadmium	<0.00050		0.00050		mg/L		02/18/22 10:48	02/18/22 23:50	1
Calcium	<0.20		0.20		mg/L		02/18/22 10:48	02/18/22 23:50	1
Chromium	<0.0050		0.0050		mg/L		02/18/22 10:48	02/18/22 23:50	1
Cobalt	<0.0010		0.0010		mg/L		02/18/22 10:48	02/18/22 23:50	1
Lead	<0.00050		0.00050		mg/L		02/18/22 10:48	02/18/22 23:50	1
Lithium	<0.0020		0.0020		mg/L		02/18/22 10:48	02/18/22 23:50	1
Molybdenum	<0.0050		0.0050		mg/L		02/18/22 10:48	02/18/22 23:50	1
Selenium	<0.0025		0.0025		mg/L		02/18/22 10:48	02/18/22 23:50	1
Thallium	<0.0020		0.0020		mg/L		02/18/22 10:48	02/18/22 23:50	1

Lab Sample ID: MB 500-643201/1-A
Matrix: Water
Analysis Batch: 643796

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 643201

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Boron	<0.050		0.050		mg/L		02/18/22 10:48	02/21/22 14:22	1

Lab Sample ID: LCS 500-643201/2-A
Matrix: Water
Analysis Batch: 643537

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 643201

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0854		mg/L		85	80 - 120
Barium	2.00	1.93		mg/L		96	80 - 120
Beryllium	0.0500	0.0464		mg/L		93	80 - 120
Cadmium	0.0500	0.0475		mg/L		95	80 - 120
Calcium	10.0	9.29		mg/L		93	80 - 120
Chromium	0.200	0.199		mg/L		100	80 - 120
Cobalt	0.500	0.495		mg/L		99	80 - 120
Lead	0.100	0.102		mg/L		102	80 - 120
Lithium	0.500	0.493		mg/L		99	80 - 120
Molybdenum	1.00	0.927		mg/L		93	80 - 120
Selenium	0.100	0.0917		mg/L		92	80 - 120
Thallium	0.100	0.104		mg/L		104	80 - 120

Lab Sample ID: LCS 500-643201/2-A
Matrix: Water
Analysis Batch: 643796

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 643201

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

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QC Sample Results

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

Job ID: 500-212085-1

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

Lab Sample ID: MB 500-643202/1-A
Matrix: Water
Analysis Batch: 643537

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 643202

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0030		0.0030		mg/L		02/18/22 10:52	02/18/22 20:03	1
Arsenic	<0.0010		0.0010		mg/L		02/18/22 10:52	02/18/22 20:03	1
Barium	<0.0025		0.0025		mg/L		02/18/22 10:52	02/18/22 20:03	1
Beryllium	<0.0010		0.0010		mg/L		02/18/22 10:52	02/18/22 20:03	1
Cadmium	<0.00050		0.00050		mg/L		02/18/22 10:52	02/18/22 20:03	1
Calcium	<0.20		0.20		mg/L		02/18/22 10:52	02/18/22 20:03	1
Chromium	<0.0050		0.0050		mg/L		02/18/22 10:52	02/18/22 20:03	1
Cobalt	<0.0010		0.0010		mg/L		02/18/22 10:52	02/18/22 20:03	1
Lead	<0.00050		0.00050		mg/L		02/18/22 10:52	02/18/22 20:03	1
Lithium	<0.0020		0.0020		mg/L		02/18/22 10:52	02/18/22 20:03	1
Molybdenum	<0.0050		0.0050		mg/L		02/18/22 10:52	02/18/22 20:03	1
Selenium	<0.0025		0.0025		mg/L		02/18/22 10:52	02/18/22 20:03	1
Thallium	<0.0020		0.0020		mg/L		02/18/22 10:52	02/18/22 20:03	1

Lab Sample ID: MB 500-643202/1-A
Matrix: Water
Analysis Batch: 643796

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 643202

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Boron	<0.050		0.050		mg/L		02/18/22 10:52	02/21/22 16:00	1

Lab Sample ID: LCS 500-643202/2-A
Matrix: Water
Analysis Batch: 643537

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 643202

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0877		mg/L		88	80 - 120
Barium	2.00	1.95		mg/L		98	80 - 120
Beryllium	0.0500	0.0472		mg/L		94	80 - 120
Cadmium	0.0500	0.0483		mg/L		97	80 - 120
Calcium	10.0	9.77		mg/L		98	80 - 120
Chromium	0.200	0.201		mg/L		101	80 - 120
Cobalt	0.500	0.502		mg/L		100	80 - 120
Lead	0.100	0.103		mg/L		103	80 - 120
Lithium	0.500	0.496		mg/L		99	80 - 120
Molybdenum	1.00	0.930		mg/L		93	80 - 120
Selenium	0.100	0.0942		mg/L		94	80 - 120
Thallium	0.100	0.103		mg/L		103	80 - 120

Lab Sample ID: LCS 500-643202/2-A
Matrix: Water
Analysis Batch: 643796

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 643202

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

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QC Sample Results

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

Job ID: 500-212085-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-642080/12-A
Matrix: Water
Analysis Batch: 642359

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 642080

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/11/22 14:50	02/14/22 08:35	1

Lab Sample ID: LCS 500-642080/23-A
Matrix: Water
Analysis Batch: 642359

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 642080

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00205		mg/L		102	80 - 120

Lab Sample ID: MB 500-642384/12-A
Matrix: Water
Analysis Batch: 642545

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 642384

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/14/22 15:50	02/15/22 08:10	1

Lab Sample ID: LCS 500-642384/13-A
Matrix: Water
Analysis Batch: 642545

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 642384

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00210		mg/L		105	80 - 120

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

Lab Sample ID: MB 500-641701/1
Matrix: Water
Analysis Batch: 641701

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			02/10/22 06:28	1

Lab Sample ID: LCS 500-641701/2
Matrix: Water
Analysis Batch: 641701

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	270		mg/L		108	80 - 120

Lab Sample ID: MB 500-641916/1
Matrix: Water
Analysis Batch: 641916

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			02/11/22 06:03	1

QC Sample Results

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

Job ID: 500-212085-1

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

Lab Sample ID: LCS 500-641916/2
Matrix: Water
Analysis Batch: 641916

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	266		mg/L		106	80 - 120

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-645327/16
Matrix: Water
Analysis Batch: 645327

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			03/02/22 14:32	1

Lab Sample ID: LCS 500-645327/17
Matrix: Water
Analysis Batch: 645327

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 500-642706/3
Matrix: Water
Analysis Batch: 642706

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			02/15/22 16:44	1

Lab Sample ID: LCS 500-642706/4
Matrix: Water
Analysis Batch: 642706

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	10.5		mg/L		105	90 - 119

Lab Sample ID: 500-212085-1 MS
Matrix: Water
Analysis Batch: 642706

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.20		5.00	5.22		mg/L		100	75 - 125

Lab Sample ID: 500-212085-1 MSD
Matrix: Water
Analysis Batch: 642706

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.20		5.00	5.24		mg/L		101	75 - 125	0	20

QC Sample Results

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

Job ID: 500-212085-1

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: MB 500-643855/3
Matrix: Water
Analysis Batch: 643855

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			02/22/22 11:03	1

Lab Sample ID: LCS 500-643855/4
Matrix: Water
Analysis Batch: 643855

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	10.5		mg/L		105	90 - 119

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-645387/32
Matrix: Water
Analysis Batch: 645387

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			03/02/22 17:09	1

Lab Sample ID: LCS 500-645387/34
Matrix: Water
Analysis Batch: 645387

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	21.2		mg/L		106	88 - 123

Eurofins Chicago

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

FAB

Chain of Custody Record


Client Information		Sampler: <u>M. Ross</u>		Lab PM: Mockler, Diana J		Carrier Tracking No(s):		COC No: 500-98563-43258 1						
Client Contact: Mitchel Dolan		Phone: <u>630 703 7240</u>		E-Mail: Diana Mockler@Eurofinset.com		State of Origin:		Page: Page 1 of 1						
Company: KPRG and Associates, Inc.		PWSID:		Analysis Requested					Job #: <u>500-212085</u>					
Address: 14665 West Lisbon Road, Suite 1A		Due Date Requested:		Field Filtered Sample (Yes or No): Perfor. MS/MSD (Yes or No): 903.0 - Standard Target List Ra226Ra228_GFPC - Local Method 904.0 - Standard Target List 6020A, 7470A 2540C, 4500_F_C, SM4500_CL_E, SM4500_S04_E		Total Number of Containers:		Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)						
City: Brookfield		TAT Requested (days):						Other:						
State, Zip: WI, 53005		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No												
Phone: 262-781-0475(Tel)		PO #: 4502081030												
Email: mitcheld@kprginc.com		WO #:												
Project Name: Powerton CCR		Project #: 50011612												
Site: Illinois		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)	Perfor. MS/MSD (Yes or No)	903.0 - Standard Target List	Ra226Ra228_GFPC - Local Method	904.0 - Standard Target List	6020A, 7470A	2540C, 4500_F_C, SM4500_CL_E, SM4500_S04_E	Special Instructions/Note.	
1 <u>Mw-2</u>		<u>2/8</u>		<u>12:56</u>	<u>G</u>	<u>Water</u>		<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
2 <u>Mw-3</u>				<u>14:29</u>	<u>G</u>	<u>Water</u>		<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
3 <u>Mw-4</u>				<u>15:12</u>	<u>G</u>	<u>Water</u>		<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
4 <u>Mw-5</u>				<u>16:17</u>	<u>G</u>	<u>Water</u>		<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
5 <u>DEP</u>					<u>G</u>	<u>Water</u>		<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
						<u>Water</u>								
						<u>Water</u>								
Possible Hazard Identification <input 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 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>M. Ross</u>		Date/Time: <u>2/8/17 45</u>		Company: <u>KPRG</u>		Received by: <u>Shm Loth</u>		Date/Time: <u>2/9/22 1605</u>		Company: <u>ERT</u>				
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:				
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:				
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No: <u>1739729</u>		Cooler Temperature(s) °C and Other Remarks: <u>1.3 + 0.8</u>										

Furofins Chicago

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

Chain of Custody Record

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Client Information		Sampler: <i>M. Reiss</i>		Lab PM: Mockler, Diana J		Carrier Tracking No(s):		COC No: 500-98563-43258 1	
Client Contact: Mitchel Dolan		Phone: <i>630 203.7240</i>		E-Mail: Diana.Mockler@Eurofinset.com		State of Origin:		Page: Page 1 of 1	
Company: KPRG and Associates, Inc.				PWSID:		Analysis Request  500-212085 COC		Job #: <i>500-212085</i>	
Address: 14665 West Lisbon Road, Suite 1A		Due Date Requested:		TAT Requested (days):				Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No	
City: Brookfield		Project Name: Powerton CCR		Project #: 50011612		Field Filtered Sample (Yes or No): Perform MS/MSD (Yes or No): 903.0 - Standard Target List R226R228_GPCC - Local Method 904.0 - Standard Target List 6020A, 7470A 2540C, 4500_F_C, SM4500_CL_E, SM4500_SO4_E		Other:	
State, Zip: WI, 53005		Site: Illinois		SSOW#:				Total Number of Containers:	
Phone: 262-781-0475(Tel)		PO #: 4502081030		WO #:		Special Instructions/Note:			
Email: mitcheld@kprginc.com		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	
								Preservation Code:	
		<i>2/9</i>		<i>15:02</i>		<i>G</i>		<i>Water</i>	
		<i>2/9</i>		<i>13:50</i>		<i>G</i>		<i>Water</i>	
								<i>Water</i>	
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ORIGIN ID:PIAA (000) 000-0000

KPRG AND ASSOCIATES
414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 09FEB22
ACTWGT: 60.00 LB
CAD: 6994779/SSFE2220
DIMS: 24x18x12 IN

BILL THIRD PARTY

TO **SAMPLE RECEIVING**
EUROFINS
2417 BOND ST

UNIVERSITY PARK IL 60484

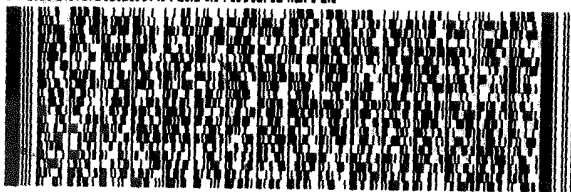
(000) 000-0000

REF:

INU:

DEPT:

011 0000 1121 00000001 10 1 0000 001 00 1000 0 000



FedEx
Express



AM105901022012Z

1 of 3

FRI - 11 FEB 4:30P

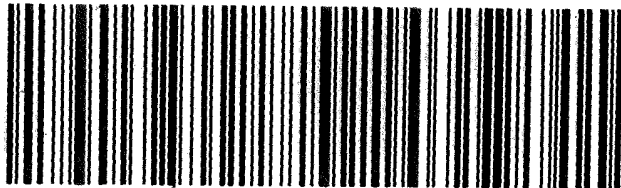
TRK# **2896 6850 2775**
0201

**** 2DAY ****

MASTER

4Z QMCKQ

60484
IL-US ORD



500-212085 Wayb

Part # 156297-435 PRDB EXP 10/22

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Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-212085-1

Login Number: 212085

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	0.8,2.1
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

Job ID: 500-212085-1

Client Sample ID: MW-2

Date Collected: 02/08/22 12:56

Date Received: 02/09/22 16:05

Lab Sample ID: 500-212085-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			643201	02/18/22 10:48		TAL CHI
Total Recoverable	Analysis	6020A		1	643537	02/18/22 23:57	FXG	TAL CHI
Total Recoverable	Prep	3005A			643201	02/18/22 10:48		TAL CHI
Total Recoverable	Analysis	6020A		1	644255	02/23/22 11:59	FXG	TAL CHI
Total/NA	Prep	7470A			642384	02/14/22 15:50	MJG	TAL CHI
Total/NA	Analysis	7470A		1	642545	02/15/22 08:14	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	641701	02/10/22 07:17	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	645327	03/02/22 14:51	PFK	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	642706	02/15/22 17:03	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		1	645387	03/02/22 17:13	PFK	TAL CHI

Client Sample ID: MW-3

Date Collected: 02/08/22 14:29

Date Received: 02/09/22 16:05

Lab Sample ID: 500-212085-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			643201	02/18/22 10:48		TAL CHI
Total Recoverable	Analysis	6020A		1	643537	02/19/22 00:15	FXG	TAL CHI
Total Recoverable	Prep	3005A			643201	02/18/22 10:48		TAL CHI
Total Recoverable	Analysis	6020A		1	643796	02/21/22 14:30	FXG	TAL CHI
Total/NA	Prep	7470A			642080	02/11/22 14:50	MJG	TAL CHI
Total/NA	Analysis	7470A		1	642359	02/14/22 09:05	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	641701	02/10/22 07:19	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		1	645327	03/02/22 14:35	PFK	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	642706	02/15/22 17:16	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	645387	03/02/22 17:15	PFK	TAL CHI

Client Sample ID: MW-4

Date Collected: 02/08/22 15:12

Date Received: 02/09/22 16:05

Lab Sample ID: 500-212085-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			643201	02/18/22 10:48		TAL CHI
Total Recoverable	Analysis	6020A		1	643537	02/19/22 00:18	FXG	TAL CHI
Total Recoverable	Prep	3005A			643201	02/18/22 10:48		TAL CHI
Total Recoverable	Analysis	6020A		1	643796	02/21/22 14:33	FXG	TAL CHI
Total/NA	Prep	7470A			642384	02/14/22 15:50	MJG	TAL CHI
Total/NA	Analysis	7470A		1	642545	02/15/22 08:16	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	641701	02/10/22 07:22	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	645327	03/02/22 14:51	PFK	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	642706	02/15/22 17:22	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	645387	03/02/22 17:15	PFK	TAL CHI

Lab Chronicle

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

Job ID: 500-212085-1

Client Sample ID: MW-5

Date Collected: 02/08/22 16:17

Date Received: 02/09/22 16:05

Lab Sample ID: 500-212085-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			643201	02/18/22 10:48		TAL CHI
Total Recoverable	Analysis	6020A		1	643537	02/19/22 00:22	FXG	TAL CHI
Total Recoverable	Prep	3005A			643201	02/18/22 10:48		TAL CHI
Total Recoverable	Analysis	6020A		1	643796	02/21/22 14:37	FXG	TAL CHI
Total/NA	Prep	7470A			642384	02/14/22 15:50	MJG	TAL CHI
Total/NA	Analysis	7470A		1	642545	02/15/22 08:18	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	641701	02/10/22 07:24	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	645327	03/02/22 14:51	PFK	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	642706	02/15/22 17:26	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	645387	03/02/22 17:07	PFK	TAL CHI

Client Sample ID: Duplicate

Date Collected: 02/08/22 00:00

Date Received: 02/09/22 16:05

Lab Sample ID: 500-212085-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			643202	02/18/22 10:52		TAL CHI
Total Recoverable	Analysis	6020A		1	643537	02/18/22 20:52	FXG	TAL CHI
Total Recoverable	Prep	3005A			643202	02/18/22 10:52		TAL CHI
Total Recoverable	Analysis	6020A		1	643796	02/21/22 16:37	FXG	TAL CHI
Total/NA	Prep	7470A			642384	02/14/22 15:50	MJG	TAL CHI
Total/NA	Analysis	7470A		1	642545	02/15/22 08:20	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	641701	02/10/22 07:27	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	645327	03/02/22 14:52	PFK	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	643855	02/22/22 12:00	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	645387	03/02/22 17:08	PFK	TAL CHI

Client Sample ID: MW-01

Date Collected: 02/09/22 15:02

Date Received: 02/10/22 13:55

Lab Sample ID: 500-212085-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			643202	02/18/22 10:52		TAL CHI
Total Recoverable	Analysis	6020A		1	643537	02/18/22 20:55	FXG	TAL CHI
Total Recoverable	Prep	3005A			643202	02/18/22 10:52		TAL CHI
Total Recoverable	Analysis	6020A		1	643796	02/21/22 16:40	FXG	TAL CHI
Total/NA	Prep	7470A			642384	02/14/22 15:50	MJG	TAL CHI
Total/NA	Analysis	7470A		1	642545	02/15/22 08:23	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	641916	02/11/22 06:21	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	645327	03/02/22 14:52	PFK	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	643855	02/22/22 12:04	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		1	645387	03/02/22 17:07	PFK	TAL CHI

Lab Chronicle

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

Job ID: 500-212085-1

Client Sample ID: MW-10

Date Collected: 02/09/22 13:50

Date Received: 02/10/22 13:55

Lab Sample ID: 500-212085-7

Matrix: Water

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total Recoverable	Prep	3005A			643202	02/18/22 10:52		TAL CHI
Total Recoverable	Analysis	6020A		1	643537	02/18/22 20:58	FXG	TAL CHI
Total Recoverable	Prep	3005A			643202	02/18/22 10:52		TAL CHI
Total Recoverable	Analysis	6020A		1	643796	02/21/22 16:44	FXG	TAL CHI
Total/NA	Prep	7470A			642384	02/14/22 15:50	MJG	TAL CHI
Total/NA	Analysis	7470A		1	642545	02/15/22 08:25	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	641916	02/11/22 06:23	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		2	645327	03/02/22 14:52	PFK	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	643855	02/22/22 12:08	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	645387	03/02/22 17:08	PFK	TAL CHI

Laboratory References:

TAL 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

Job ID: 500-212085-1

Laboratory: Eurofins Chicago

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

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 500-212085-2
Client Project/Site: Powerton CCR FAB

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

Attn: Richard Gnat



Authorized for release by:
3/17/2022 8:38:30 AM

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

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

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



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Case Narrative

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

Job ID: 500-212085-2

Job ID: 500-212085-2

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-212085-2

Comments

No additional comments.

Receipt

The samples were received on 2/9/2022 4:05 PM. 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 0.8° C and 2.1° C.

RAD

Method 903.0: Radium 226 Batch 160-551587:

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-2 (500-212085-1), MW-3 (500-212085-2), MW-4 (500-212085-3), MW-5 (500-212085-4), Duplicate (500-212085-5), MW-01 (500-212085-6), MW-10 (500-212085-7), (LCS 160-551587/1-A), (MB 160-551587/21-A), (500-212083-E-1-A) and (500-212083-D-1-A DU)

Method 904.0: Radium 228 batch 551588

The detection goal was not met for the following sample(s). Samples was prepped at a reduced volume due to the presence of matrix interferences: MW-10 (500-212085-7). Analytical results are reported with the detection limit achieved.

Method 904.0: Radium 228 batch 551588

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-2 (500-212085-1), MW-3 (500-212085-2), MW-4 (500-212085-3), MW-5 (500-212085-4), Duplicate (500-212085-5), MW-01 (500-212085-6), MW-10 (500-212085-7), (LCS 160-551588/1-A), (MB 160-551588/21-A), (500-212083-E-1-B) and (500-212083-D-1-B DU)

Method 904.0: Radium 228 batch 551588

The LCS recovered at (129%). The limits in our LIMS system at 75-125 reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of (61-138%) per method requirements. The LCS passes, no further action is required.

(LCS 160-551588/1-A)

Method PrecSep_0:

Method PrecSep-21:

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

Method Summary

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

Job ID: 500-212085-2

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

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

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

Sample Summary

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

Job ID: 500-212085-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-212085-1	MW-2	Water	02/08/22 12:56	02/09/22 16:05
500-212085-2	MW-3	Water	02/08/22 14:29	02/09/22 16:05
500-212085-3	MW-4	Water	02/08/22 15:12	02/09/22 16:05
500-212085-4	MW-5	Water	02/08/22 16:17	02/09/22 16:05
500-212085-5	Duplicate	Water	02/08/22 00:00	02/09/22 16:05
500-212085-6	MW-01	Water	02/09/22 15:02	02/10/22 13:55
500-212085-7	MW-10	Water	02/09/22 13:50	02/10/22 13:55

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Client Sample Results

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

Job ID: 500-212085-2

Client Sample ID: MW-2

Lab Sample ID: 500-212085-1

Date Collected: 02/08/22 12:56

Matrix: Water

Date Received: 02/09/22 16:05

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0594	U	0.0857	0.0859	1.00	0.146	pCi/L	02/21/22 09:25	03/15/22 13:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.8		40 - 110					02/21/22 09:25	03/15/22 13:52	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.133	U	0.320	0.320	1.00	0.554	pCi/L	02/21/22 09:59	03/04/22 12:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.8		40 - 110					02/21/22 09:59	03/04/22 12:44	1
Y Carrier	84.1		40 - 110					02/21/22 09:59	03/04/22 12:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.192	U	0.331	0.331	5.00	0.554	pCi/L		03/16/22 17:51	1

Client Sample Results

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

Job ID: 500-212085-2

Client Sample ID: MW-3

Lab Sample ID: 500-212085-2

Date Collected: 02/08/22 14:29

Matrix: Water

Date Received: 02/09/22 16:05

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0307	U	0.0771	0.0772	1.00	0.142	pCi/L	02/21/22 09:25	03/15/22 13:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		40 - 110					02/21/22 09:25	03/15/22 13:52	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.563		0.327	0.331	1.00	0.486	pCi/L	02/21/22 09:59	03/04/22 12:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		40 - 110					02/21/22 09:59	03/04/22 12:44	1
Y Carrier	83.4		40 - 110					02/21/22 09:59	03/04/22 12:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.593		0.336	0.340	5.00	0.486	pCi/L		03/16/22 17:51	1

Client Sample Results

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

Job ID: 500-212085-2

Client Sample ID: MW-4

Lab Sample ID: 500-212085-3

Date Collected: 02/08/22 15:12

Matrix: Water

Date Received: 02/09/22 16:05

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0473	U	0.0813	0.0814	1.00	0.143	pCi/L	02/21/22 09:25	03/15/22 13:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	55.6		40 - 110					02/21/22 09:25	03/15/22 13:53	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.167	U	0.476	0.476	1.00	0.818	pCi/L	02/21/22 09:59	03/04/22 12:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	55.6		40 - 110					02/21/22 09:59	03/04/22 12:44	1
Y Carrier	83.0		40 - 110					02/21/22 09:59	03/04/22 12:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.214	U	0.483	0.483	5.00	0.818	pCi/L		03/16/22 17:51	1

Client Sample Results

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

Job ID: 500-212085-2

Client Sample ID: MW-5

Lab Sample ID: 500-212085-4

Date Collected: 02/08/22 16:17

Matrix: Water

Date Received: 02/09/22 16:05

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.127		0.0749	0.0757	1.00	0.0950	pCi/L	02/21/22 09:25	03/15/22 13:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.3		40 - 110					02/21/22 09:25	03/15/22 13:53	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0504	U	0.250	0.250	1.00	0.438	pCi/L	02/21/22 09:59	03/04/22 12:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.3		40 - 110					02/21/22 09:59	03/04/22 12:46	1
Y Carrier	84.5		40 - 110					02/21/22 09:59	03/04/22 12:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.177	U	0.261	0.261	5.00	0.438	pCi/L		03/16/22 17:51	1

Client Sample Results

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

Job ID: 500-212085-2

Client Sample ID: Duplicate
Date Collected: 02/08/22 00:00
Date Received: 02/09/22 16:05

Lab Sample ID: 500-212085-5
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0426	U	0.0556	0.0557	1.00	0.0926	pCi/L	02/21/22 09:25	03/15/22 13:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					02/21/22 09:25	03/15/22 13:53	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.127	U	0.242	0.242	1.00	0.412	pCi/L	02/21/22 09:59	03/04/22 12:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					02/21/22 09:59	03/04/22 12:46	1
Y Carrier	85.6		40 - 110					02/21/22 09:59	03/04/22 12:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.170	U	0.248	0.248	5.00	0.412	pCi/L		03/16/22 17:51	1

Client Sample Results

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

Job ID: 500-212085-2

Client Sample ID: MW-01

Lab Sample ID: 500-212085-6

Date Collected: 02/09/22 15:02

Matrix: Water

Date Received: 02/10/22 13:55

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0805	U	0.0784	0.0788	1.00	0.120	pCi/L	02/21/22 09:25	03/15/22 13:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		40 - 110					02/21/22 09:25	03/15/22 13:53	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.262	U	0.319	0.320	1.00	0.527	pCi/L	02/21/22 09:59	03/04/22 12:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		40 - 110					02/21/22 09:59	03/04/22 12:47	1
Y Carrier	84.5		40 - 110					02/21/22 09:59	03/04/22 12:47	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.343	U	0.328	0.330	5.00	0.527	pCi/L		03/16/22 17:51	1

Client Sample Results

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

Job ID: 500-212085-2

Client Sample ID: MW-10
Date Collected: 02/09/22 13:50
Date Received: 02/10/22 13:55

Lab Sample ID: 500-212085-7
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.55		0.696	0.733	1.00	0.673	pCi/L	02/21/22 09:25	03/15/22 13:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	69.8		40 - 110					02/21/22 09:25	03/15/22 13:47	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	3.96	G	1.50	1.55	1.00	2.08	pCi/L	02/21/22 09:59	03/04/22 12:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	69.8		40 - 110					02/21/22 09:59	03/04/22 12:47	1
Y Carrier	86.0		40 - 110					02/21/22 09:59	03/04/22 12:47	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	6.51		1.65	1.71	5.00	2.08	pCi/L		03/16/22 17:51	1

Definitions/Glossary

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

Job ID: 500-212085-2

Qualifiers

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

Glossary

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

QC Association Summary

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

Job ID: 500-212085-2

Rad

Prep Batch: 551587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-1	MW-2	Total/NA	Water	PrecSep-21	
500-212085-2	MW-3	Total/NA	Water	PrecSep-21	
500-212085-3	MW-4	Total/NA	Water	PrecSep-21	
500-212085-4	MW-5	Total/NA	Water	PrecSep-21	
500-212085-5	Duplicate	Total/NA	Water	PrecSep-21	
500-212085-6	MW-01	Total/NA	Water	PrecSep-21	
500-212085-7	MW-10	Total/NA	Water	PrecSep-21	
MB 160-551587/21-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-551587/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 551588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-212085-1	MW-2	Total/NA	Water	PrecSep_0	
500-212085-2	MW-3	Total/NA	Water	PrecSep_0	
500-212085-3	MW-4	Total/NA	Water	PrecSep_0	
500-212085-4	MW-5	Total/NA	Water	PrecSep_0	
500-212085-5	Duplicate	Total/NA	Water	PrecSep_0	
500-212085-6	MW-01	Total/NA	Water	PrecSep_0	
500-212085-7	MW-10	Total/NA	Water	PrecSep_0	
MB 160-551588/21-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-551588/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

QC Sample Results

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

Job ID: 500-212085-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-551587/21-A
Matrix: Water
Analysis Batch: 555442

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551587

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.002898	U	0.0547	0.0547	1.00	0.110	pCi/L	02/21/22 09:25	03/15/22 13:48	1
Carrier	MB	MB	Limits			Prepared	Analyzed	Dil Fac		
	%Yield	Qualifier								
Ba Carrier	90.0		40 - 110			02/21/22 09:25	03/15/22 13:48	1		

Lab Sample ID: LCS 160-551587/1-A
Matrix: Water
Analysis Batch: 555442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551587

Analyte	Spike Added	LCS	LCS	Total	RL	MDC	Unit	%Rec	%Rec. Limits
		Result	Qual	Uncert. (2σ+/-)					
Radium-226	11.3	11.04		1.16	1.00	0.151	pCi/L	97	75 - 125
Carrier	LCS	LCS	Limits			Prepared	Analyzed	Dil Fac	
	%Yield	Qualifier							
Ba Carrier	87.5		40 - 110						

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-551588/21-A
Matrix: Water
Analysis Batch: 553453

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551588

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.03136	U	0.206	0.206	1.00	0.367	pCi/L	02/21/22 09:59	03/04/22 12:47	1
Carrier	MB	MB	Limits			Prepared	Analyzed	Dil Fac		
	%Yield	Qualifier								
Ba Carrier	90.0		40 - 110			02/21/22 09:59	03/04/22 12:47	1		
Y Carrier	86.7		40 - 110			02/21/22 09:59	03/04/22 12:47	1		

Lab Sample ID: LCS 160-551588/1-A
Matrix: Water
Analysis Batch: 553454

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551588

Analyte	Spike Added	LCS	LCS	Total	RL	MDC	Unit	%Rec	%Rec. Limits
		Result	Qual	Uncert. (2σ+/-)					
Radium-228	8.82	11.36		1.31	1.00	0.440	pCi/L	129	75 - 125
Carrier	LCS	LCS	Limits			Prepared	Analyzed	Dil Fac	
	%Yield	Qualifier							
Ba Carrier	87.5		40 - 110						
Y Carrier	83.7		40 - 110						

Eurofins Chicago

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

FAB

Chain of Custody Record

eurofins Environment Testing
America

Client Information		Sampler <i>M. Ross</i>	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-98563-43258 1																																																																																																							
Client Contact: Mitchel Dolan		Phone: <i>630 703 7240</i>	E-Mail: Diana.Mockler@Eurofinset.com	State of Origin:	Page: Page 1 of 1																																																																																																							
Company KPRG and Associates, Inc.		PWSID:	Analysis Requested																																																																																																									
Address: 14665 West Lisbon Road, Suite 1A		Due Date Requested	<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small;"> Field Filtered Sample (Yes or No) </div> <table border="1" style="font-size: x-small;"> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small;"> Total Number of Containers </div> </div>																									Job #: <i>500-212085</i>																																																																																
City: Brookfield		TAT Requested (days):	Preservation Codes:																																																																																																									
State, Zip: WI, 53005		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No	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 - Amchlror 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 Z - other (specify)																																																																																																									
Phone: 262-781-0475(Tel)		PO #: 4502081030	<table border="1" style="font-size: x-small;"> <tr> <th colspan="2">Field Filtered Sample (Yes or No)</th> <th colspan="3">903.0 - Standard Target List</th> <th colspan="3">Ra226Ra228_GFPC - Local Method</th> <th colspan="3">904.0 - Standard Target List</th> <th colspan="3">6020A, 7470A</th> <th colspan="3">2540C, 4500_F_C, SM4500_C1_E, SM4500_S04_E</th> </tr> <tr> <td colspan="2"> </td> <td colspan="3"> </td> <td colspan="3"> </td> <td colspan="3"> </td> <td colspan="3"> </td> <td colspan="3"> </td> </tr> <tr> <td colspan="2"> </td> <td colspan="3"> </td> <td colspan="3"> </td> <td colspan="3"> </td> <td colspan="3"> </td> <td colspan="3"> </td> </tr> <tr> <td colspan="2"> </td> <td colspan="3"> </td> <td colspan="3"> </td> <td colspan="3"> </td> <td colspan="3"> </td> <td colspan="3"> </td> </tr> <tr> <td colspan="2"> </td> <td colspan="3"> </td> <td colspan="3"> </td> <td colspan="3"> </td> <td colspan="3"> </td> <td colspan="3"> </td> </tr> <tr> <td colspan="2"> </td> <td colspan="3"> </td> <td colspan="3"> </td> <td colspan="3"> </td> <td colspan="3"> </td> <td colspan="3"> </td> </tr> </table>			Field Filtered Sample (Yes or No)		903.0 - Standard Target List			Ra226Ra228_GFPC - Local Method			904.0 - Standard Target List			6020A, 7470A			2540C, 4500_F_C, SM4500_C1_E, SM4500_S04_E																																																																																								Other:
Field Filtered Sample (Yes or No)		903.0 - Standard Target List				Ra226Ra228_GFPC - Local Method			904.0 - Standard Target List			6020A, 7470A			2540C, 4500_F_C, SM4500_C1_E, SM4500_S04_E																																																																																													
Email: mitcheld@kprginc.com		WO #:	<table border="1" style="font-size: x-small;"> <tr> <th>Sample Identification</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, AA=Air)</th> <th>Field Filtered</th> <th>903.0</th> <th>Ra226Ra228_GFPC</th> <th>904.0</th> <th>6020A, 7470A</th> <th>2540C, 4500_F_C</th> </tr> <tr> <td colspan="5"> </td> <td> </td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>N</td> </tr> </table>			Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, AA=Air)	Field Filtered	903.0	Ra226Ra228_GFPC	904.0	6020A, 7470A	2540C, 4500_F_C							D	D	D	D	N	Special Instructions/Note.																																																																																
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							D	D	D	D	N																																																																																																	
Project Name: Powerton CCR		Project #: 50011612						<table border="1" style="font-size: x-small;"> <tr> <td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr> <td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr> <td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr> <td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr> <td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table>																																																																																																				
Site: Illinois		SSOW#:																																																																																																										


1
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5

Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
<input 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 type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Deliverable Requested I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:			
Empty Kit Relinquished by:	Date	Time	Method of Shipment:		
Relinquished by: <i>M. Ross</i>	Date/Time: <i>2/18 1745</i>	Company: <i>KPRG</i>	Received by: <i>[Signature]</i>	Date/Time: <i>2/19/22 1605</i>	Company: <i>ERT</i>
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No <i>1739729</i>	Cooler Temperature(s) °C and Other Remarks: <i>1.3 +0.8</i>			

Fuofins Chicago

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

Chain of Custody Record

Client Information		Sampler <i>M. Reiss</i>	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-98563-43258 1								
Client Contact: Mitchel Dolan		Phone: <i>630 203.7240</i>	E-Mail: Diana.Mockler@Eurofinset.com	State of Origin:	Page: Page 1 of 1								
Company: KPRG and Associates, Inc.		PWSID:	Analysis Request										
Address: 14665 West Lisbon Road, Suite 1A		Due Date Requested:	 500-212085 COC										
City: Brookfield		TAT Requested (days):											
State, Zip: WI, 53005		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No											
Phone: 262-781-0475(Tel)		PO #: 4502081030											
Email: mitcheld@kprginc.com		WO #:	Job #: <i>500-212085</i>										
Project Name: Powerton CCR		Project #: 50011612	Preservation Codes:										
Site: Illinois		SSOW#:	A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)										
Other:													
Special Instructions/Note:													
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Preformed MS/MSD (Yes or No)	903.0 - Standard Target List	R2226R228_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 Code:		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<i>mw-1</i>		<i>2/9</i>	<i>15:02</i>	<i>G</i>	<i>Water</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<i>mw-10</i>		<i>2/9</i>	<i>13:50</i>	<i>G</i>	<i>Water</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
					<i>Water</i>								
					<i>Water</i>								
					<i>Water</i>								
					<i>Water</i>								
					<i>Water</i>								
					<i>Water</i>								
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)							
<input 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 type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Deliverable Requested I, II, III, IV, Other (specify)						Special Instructions/QC Requirements							
Empty Kit Relinquished by:			Date	Time	Method of Shipment:								
Relinquished by: <i>M. Reiss</i>			Date/Time: <i>2/9 16:00</i>	Company:	Received by: <i>Stephanie Hernandez</i>			Date/Time: <i>2/10/22 1355</i>	Company: <i>EETA</i>				
Relinquished by:			Date/Time:	Company:	Received by:			Date/Time:	Company:				
Relinquished by:			Date/Time:	Company:	Received by:			Date/Time:	Company:				
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No: <i>1802642</i>		Cooler Temperature(s) °C and Other Remarks: <i>2.1</i>									

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

SHIP DATE: 09FEB22
ACTWGT: 60.00 LB
CAD: 6994779/SSFE2220
DIMS: 24x18x12 IN
BILL THIRD PARTY

Part # 156297-435 PRDB EXP 10/22
#ZFV24Z37

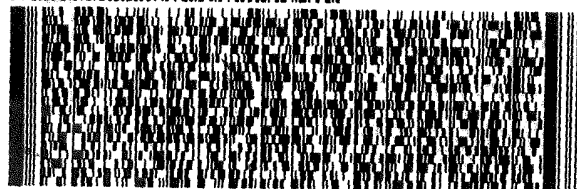
TO SAMPLE RECEIVING
EUROFINS
2417 BOND ST

UNIVERSITY PARK IL 60484

(000) 000-0000
INU:
PO:

REF:

DEPT:



FedEx
Express



AN105901022201227

1 of 3

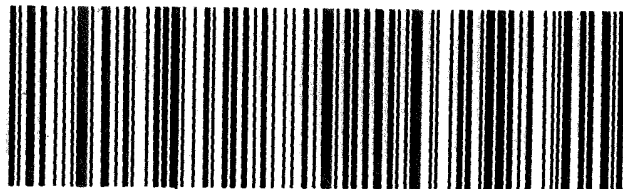
TRK# 2896 6850 2775
0201

MASTER

4Z QMCKQ

FRI - 11 FEB 4:30P
** 2DAY **

60484
IL-US ORD



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Chain of Custody Record



Client Information (Sub Contract Lab) Client Contact: Mockler, Diana J Shipping/Receiving: Diana.Mockler@Eurofinset.com Company: TestAmerica Laboratories, Inc. Address: 13715 Rider Trail North, Earth City, MO, 63045 Phone: 314-298-8566(Tel) 314-298-8757(Fax) Email: [Blank] Project Name: Powerton CCR Site: MWG - Powerton		Lab PM: Mockler, Diana J E-Mail: Diana.Mockler@Eurofinset.com Carrier Tracking No(s): 500-157130.1 State of Origin: Illinois Page: 1 of 1 Job #: 500-212085-2						
Due Date Requested: 3/1/2022 TAT Requested (days): [Blank]		Accreditations Required (See note): NELAP - Illinois Preservation Codes: A - HCL B - Hexane M - None N - NaOH O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)						
Analysis Requested 903.0/PrecSep_21 Standard Target List 904.0/PrecSep_0 Standard Target List Ra226Ra228_GFPc		Total Number of Containers						
Sample ID (Lab ID) MW-2 (500-212085-1) MW-3 (500-212085-2) MW-4 (500-212085-3) MW-5 (500-212085-4) Duplicate (500-212085-5) MW-01 (500-212085-6) MW-10 (500-212085-7)	Sample Date 2/8/22 2/8/22 2/8/22 2/8/22 2/8/22 2/9/22 2/9/22	Sample Time 12:56 Central 14:29 Central 15:12 Central 16:17 Central Central 15:02 Central 13:50 Central	Sample Type (C=Comp, G=grab) [Blank] [Blank] [Blank] [Blank] [Blank] [Blank] [Blank]	Matrix (W=water, S=solids, O=washsol, BT=Tissue, AA=Air) Water Water Water Water Water Water Water	Preservation Code: [Blank] [Blank] [Blank] [Blank] [Blank] [Blank] [Blank]	Field Filtered Sample (Yes or No) X X X X X X X	Perform MS/MSD (Yes or No) X X X X X X X	Special Instructions/Note: Full QC needed (dups. etc) Batch QC must be performed (dup. spikes, etc) - no NCMS Full QC needed (dups. etc) Batch QC must be performed (dup. spikes, etc) - no NCMS Full QC needed (dups. etc) Batch QC must be performed (dup. spikes, etc) - no NCMS Full QC needed (dups. etc) Batch QC must be performed (dup. spikes, etc) - no NCMS Full QC needed (dups. etc) Batch QC must be performed (dup. spikes, etc) - no NCMS Full QC needed (dups. etc) Batch QC must be performed (dup. spikes, etc) - no NCMS Full QC needed (dups. etc) Batch QC must be performed (dup. spikes, etc) - no NCMS Full QC needed (dups. etc) Batch QC must be performed (dup. spikes, etc) - no NCMS
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.								
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 Empty Kit Relinquished by: [Blank] Date: [Blank] Method of Shipment: [Blank] Relinquished by: Stephanie Hemminger FEDEX Date/Time: 2/10/22 10:30 Company: EETA Relinquished by: [Blank] Date/Time: [Blank] Company: [Blank] Relinquished by: [Blank] Date/Time: [Blank] Company: [Blank] Custody Seals Intact: [Blank] Custody Seal No.: [Blank] Cooler Temperature(s) °C and Other Remarks: [Blank]								
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For [Blank] Months Special Instructions/QC Requirements: [Blank]								

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-212085-2

Login Number: 212085

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	0.8,2.1
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: 500-212085-2

Login Number: 212085

List Number: 2

Creator: Worthington, Sierra M

List Source: Eurofins St. Louis

List Creation: 02/12/22 08:58 AM

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



Lab Chronicle

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

Job ID: 500-212085-2

Client Sample ID: MW-2

Date Collected: 02/08/22 12:56

Date Received: 02/09/22 16:05

Lab Sample ID: 500-212085-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			551587	02/21/22 09:25	LPS	TAL SL
Total/NA	Analysis	903.0		1	555441	03/15/22 13:52	CLP	TAL SL
Total/NA	Prep	PrecSep_0			551588	02/21/22 09:59	LPS	TAL SL
Total/NA	Analysis	904.0		1	553454	03/04/22 12:44	ANW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	555656	03/16/22 17:51	EMH	TAL SL

Client Sample ID: MW-3

Date Collected: 02/08/22 14:29

Date Received: 02/09/22 16:05

Lab Sample ID: 500-212085-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			551587	02/21/22 09:25	LPS	TAL SL
Total/NA	Analysis	903.0		1	555441	03/15/22 13:52	CLP	TAL SL
Total/NA	Prep	PrecSep_0			551588	02/21/22 09:59	LPS	TAL SL
Total/NA	Analysis	904.0		1	553454	03/04/22 12:44	ANW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	555656	03/16/22 17:51	EMH	TAL SL

Client Sample ID: MW-4

Date Collected: 02/08/22 15:12

Date Received: 02/09/22 16:05

Lab Sample ID: 500-212085-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			551587	02/21/22 09:25	LPS	TAL SL
Total/NA	Analysis	903.0		1	555441	03/15/22 13:53	CLP	TAL SL
Total/NA	Prep	PrecSep_0			551588	02/21/22 09:59	LPS	TAL SL
Total/NA	Analysis	904.0		1	553454	03/04/22 12:44	ANW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	555656	03/16/22 17:51	EMH	TAL SL

Client Sample ID: MW-5

Date Collected: 02/08/22 16:17

Date Received: 02/09/22 16:05

Lab Sample ID: 500-212085-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			551587	02/21/22 09:25	LPS	TAL SL
Total/NA	Analysis	903.0		1	555441	03/15/22 13:53	CLP	TAL SL
Total/NA	Prep	PrecSep_0			551588	02/21/22 09:59	LPS	TAL SL
Total/NA	Analysis	904.0		1	553453	03/04/22 12:46	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	555656	03/16/22 17:51	EMH	TAL SL

Lab Chronicle

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

Job ID: 500-212085-2

Client Sample ID: Duplicate
Date Collected: 02/08/22 00:00
Date Received: 02/09/22 16:05

Lab Sample ID: 500-212085-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			551587	02/21/22 09:25	LPS	TAL SL
Total/NA	Analysis	903.0		1	555441	03/15/22 13:53	CLP	TAL SL
Total/NA	Prep	PrecSep_0			551588	02/21/22 09:59	LPS	TAL SL
Total/NA	Analysis	904.0		1	553453	03/04/22 12:46	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	555656	03/16/22 17:51	EMH	TAL SL

Client Sample ID: MW-01
Date Collected: 02/09/22 15:02
Date Received: 02/10/22 13:55

Lab Sample ID: 500-212085-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			551587	02/21/22 09:25	LPS	TAL SL
Total/NA	Analysis	903.0		1	555441	03/15/22 13:53	CLP	TAL SL
Total/NA	Prep	PrecSep_0			551588	02/21/22 09:59	LPS	TAL SL
Total/NA	Analysis	904.0		1	553453	03/04/22 12:47	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	555656	03/16/22 17:51	EMH	TAL SL

Client Sample ID: MW-10
Date Collected: 02/09/22 13:50
Date Received: 02/10/22 13:55

Lab Sample ID: 500-212085-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			551587	02/21/22 09:25	LPS	TAL SL
Total/NA	Analysis	903.0		1	555442	03/15/22 13:47	FLC	TAL SL
Total/NA	Prep	PrecSep_0			551588	02/21/22 09:59	LPS	TAL SL
Total/NA	Analysis	904.0		1	553453	03/04/22 12:47	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	555656	03/16/22 17:51	EMH	TAL SL

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 500-212085-2

Laboratory: Eurofins St. Louis

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

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

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Tracer/Carrier Summary

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

Job ID: 500-212085-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (40-110)	
500-212085-1	MW-2	82.8	
500-212085-2	MW-3	88.5	
500-212085-3	MW-4	55.6	
500-212085-4	MW-5	89.3	
500-212085-5	Duplicate	90.3	
500-212085-6	MW-01	91.0	
500-212085-7	MW-10	69.8	
LCS 160-551587/1-A	Lab Control Sample	87.5	
MB 160-551587/21-A	Method Blank	90.0	

Tracer/Carrier Legend
Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (40-110)	Y (40-110)
500-212085-1	MW-2	82.8	84.1
500-212085-2	MW-3	88.5	83.4
500-212085-3	MW-4	55.6	83.0
500-212085-4	MW-5	89.3	84.5
500-212085-5	Duplicate	90.3	85.6
500-212085-6	MW-01	91.0	84.5
500-212085-7	MW-10	69.8	86.0
LCS 160-551588/1-A	Lab Control Sample	87.5	83.7
MB 160-551588/21-A	Method Blank	90.0	86.7

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

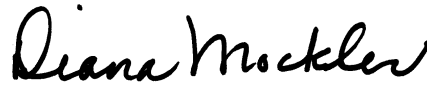
ANALYTICAL REPORT

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

Laboratory Job ID: 500-217777-1
Client Project/Site: Powerton CCR FAB

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

Attn: Richard Gnat



Authorized for release by:
6/22/2022 10:18:15 AM

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

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

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



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Case Narrative

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

Job ID: 500-217777-1

Job ID: 500-217777-1

Laboratory: Eurofins Chicago

Narrative

**Job Narrative
500-217777-1**

Comments

No additional comments.

Receipt

The samples were received on 6/8/2022 5:43 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.9° C, 0.9° C and 1.5° C.

Metals

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

General Chemistry

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

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Method Summary

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

Job ID: 500-217777-1

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

Protocol References:

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

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

Laboratory References:

TAL CHI = Eurofins 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: 500-217777-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-217777-1	MW-01	Water	06/07/22 14:32	06/08/22 17:43
500-217777-2	MW-02	Water	06/07/22 12:54	06/08/22 17:43
500-217777-3	MW-03	Water	06/07/22 12:00	06/08/22 17:43
500-217777-4	MW-04	Water	06/07/22 11:10	06/08/22 17:43
500-217777-5	MW-05	Water	06/07/22 10:18	06/08/22 17:43
500-217777-6	MW-10	Water	06/07/22 15:30	06/08/22 17:43
500-217777-7	Duplicate	Water	06/07/22 00:00	06/08/22 17:43

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Client Sample Results

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

Job ID: 500-217777-1

Client Sample ID: MW-01

Lab Sample ID: 500-217777-1

Date Collected: 06/07/22 14:32

Matrix: Water

Date Received: 06/08/22 17:43

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/10/22 14:53	06/13/22 21:29	1
Arsenic	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 21:29	1
Barium	0.040		0.0025		mg/L		06/10/22 14:53	06/13/22 21:29	1
Beryllium	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 21:29	1
Boron	0.21		0.050		mg/L		06/10/22 14:53	06/14/22 15:22	1
Cadmium	<0.00050		0.00050		mg/L		06/10/22 14:53	06/13/22 21:29	1
Calcium	81		0.20		mg/L		06/10/22 14:53	06/13/22 21:29	1
Chromium	<0.0050		0.0050		mg/L		06/10/22 14:53	06/13/22 21:29	1
Cobalt	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 21:29	1
Lead	<0.00050		0.00050		mg/L		06/10/22 14:53	06/13/22 21:29	1
Lithium	<0.010		0.010		mg/L		06/10/22 14:53	06/13/22 21:29	1
Molybdenum	0.0057		0.0050		mg/L		06/10/22 14:53	06/13/22 21:29	1
Selenium	<0.0025		0.0025		mg/L		06/10/22 14:53	06/13/22 21:29	1
Thallium	<0.0020		0.0020		mg/L		06/10/22 14:53	06/13/22 21:29	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/17/22 10:15	06/20/22 09:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	430		10		mg/L			06/10/22 04:43	1
Chloride	51		4.0		mg/L			06/10/22 10:20	2
Fluoride	0.14		0.10		mg/L			06/13/22 15:38	1
Sulfate	27		10		mg/L			06/13/22 10:16	2

Client Sample Results

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

Job ID: 500-217777-1

Client Sample ID: MW-02

Lab Sample ID: 500-217777-2

Date Collected: 06/07/22 12:54

Matrix: Water

Date Received: 06/08/22 17:43

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/10/22 14:53	06/13/22 21:54	1
Arsenic	0.0016		0.0010		mg/L		06/10/22 14:53	06/13/22 21:54	1
Barium	0.064		0.0025		mg/L		06/10/22 14:53	06/13/22 21:54	1
Beryllium	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 21:54	1
Boron	0.23		0.050		mg/L		06/10/22 14:53	06/14/22 15:39	1
Cadmium	<0.00050		0.00050		mg/L		06/10/22 14:53	06/13/22 21:54	1
Calcium	86		0.20		mg/L		06/10/22 14:53	06/13/22 21:54	1
Chromium	<0.0050		0.0050		mg/L		06/10/22 14:53	06/13/22 21:54	1
Cobalt	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 21:54	1
Lead	<0.00050		0.00050		mg/L		06/10/22 14:53	06/13/22 21:54	1
Lithium	<0.010		0.010		mg/L		06/10/22 14:53	06/13/22 21:54	1
Molybdenum	0.0063		0.0050		mg/L		06/10/22 14:53	06/13/22 21:54	1
Selenium	<0.0025		0.0025		mg/L		06/10/22 14:53	06/13/22 21:54	1
Thallium	<0.0020		0.0020		mg/L		06/10/22 14:53	06/13/22 21:54	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/17/22 10:15	06/20/22 09:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	440		10		mg/L			06/10/22 04:45	1
Chloride	49		4.0		mg/L			06/10/22 10:20	2
Fluoride	0.16		0.10		mg/L			06/13/22 15:42	1
Sulfate	32		10		mg/L			06/13/22 10:16	2

Client Sample Results

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

Job ID: 500-217777-1

Client Sample ID: MW-03

Lab Sample ID: 500-217777-3

Date Collected: 06/07/22 12:00

Matrix: Water

Date Received: 06/08/22 17:43

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/10/22 14:53	06/13/22 21:57	1
Arsenic	0.0012		0.0010		mg/L		06/10/22 14:53	06/13/22 21:57	1
Barium	0.064		0.0025		mg/L		06/10/22 14:53	06/13/22 21:57	1
Beryllium	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 21:57	1
Boron	0.37		0.050		mg/L		06/10/22 14:53	06/14/22 15:43	1
Cadmium	<0.00050		0.00050		mg/L		06/10/22 14:53	06/13/22 21:57	1
Calcium	79		0.20		mg/L		06/10/22 14:53	06/13/22 21:57	1
Chromium	<0.0050		0.0050		mg/L		06/10/22 14:53	06/13/22 21:57	1
Cobalt	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 21:57	1
Lead	<0.00050		0.00050		mg/L		06/10/22 14:53	06/13/22 21:57	1
Lithium	<0.010		0.010		mg/L		06/10/22 14:53	06/13/22 21:57	1
Molybdenum	<0.0050		0.0050		mg/L		06/10/22 14:53	06/13/22 21:57	1
Selenium	<0.0025		0.0025		mg/L		06/10/22 14:53	06/13/22 21:57	1
Thallium	<0.0020		0.0020		mg/L		06/10/22 14:53	06/13/22 21:57	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/17/22 10:15	06/20/22 09:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	370		10		mg/L			06/10/22 04:48	1
Chloride	45		4.0		mg/L			06/10/22 10:20	2
Fluoride	0.22		0.10		mg/L			06/13/22 15:45	1
Sulfate	47		10		mg/L			06/13/22 10:17	2

Client Sample Results

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

Job ID: 500-217777-1

Client Sample ID: MW-04

Lab Sample ID: 500-217777-4

Date Collected: 06/07/22 11:10

Matrix: Water

Date Received: 06/08/22 17:43

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/10/22 14:53	06/13/22 22:00	1
Arsenic	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 22:00	1
Barium	0.025		0.0025		mg/L		06/10/22 14:53	06/13/22 22:00	1
Beryllium	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 22:00	1
Boron	0.48		0.050		mg/L		06/10/22 14:53	06/14/22 15:46	1
Cadmium	<0.00050		0.00050		mg/L		06/10/22 14:53	06/13/22 22:00	1
Calcium	73		0.20		mg/L		06/10/22 14:53	06/13/22 22:00	1
Chromium	<0.0050		0.0050		mg/L		06/10/22 14:53	06/13/22 22:00	1
Cobalt	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 22:00	1
Lead	<0.00050		0.00050		mg/L		06/10/22 14:53	06/13/22 22:00	1
Lithium	<0.010		0.010		mg/L		06/10/22 14:53	06/13/22 22:00	1
Molybdenum	0.0051		0.0050		mg/L		06/10/22 14:53	06/13/22 22:00	1
Selenium	<0.0025		0.0025		mg/L		06/10/22 14:53	06/13/22 22:00	1
Thallium	<0.0020		0.0020		mg/L		06/10/22 14:53	06/13/22 22:00	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/17/22 10:15	06/20/22 09:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	320		10		mg/L			06/10/22 04:50	1
Chloride	43		4.0		mg/L			06/10/22 10:21	2
Fluoride	0.30		0.10		mg/L			06/13/22 15:48	1
Sulfate	30		10		mg/L			06/13/22 10:17	2

Client Sample Results

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

Job ID: 500-217777-1

Client Sample ID: MW-05

Lab Sample ID: 500-217777-5

Date Collected: 06/07/22 10:18

Matrix: Water

Date Received: 06/08/22 17:43

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/10/22 14:53	06/13/22 22:04	1
Arsenic	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 22:04	1
Barium	0.052		0.0025		mg/L		06/10/22 14:53	06/13/22 22:04	1
Beryllium	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 22:04	1
Boron	0.59		0.050		mg/L		06/10/22 14:53	06/14/22 15:56	1
Cadmium	<0.00050		0.00050		mg/L		06/10/22 14:53	06/13/22 22:04	1
Calcium	110		0.20		mg/L		06/10/22 14:53	06/13/22 22:04	1
Chromium	<0.0050		0.0050		mg/L		06/10/22 14:53	06/13/22 22:04	1
Cobalt	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 22:04	1
Lead	<0.00050		0.00050		mg/L		06/10/22 14:53	06/13/22 22:04	1
Lithium	<0.010		0.010		mg/L		06/10/22 14:53	06/13/22 22:04	1
Molybdenum	<0.0050		0.0050		mg/L		06/10/22 14:53	06/13/22 22:04	1
Selenium	<0.0025		0.0025		mg/L		06/10/22 14:53	06/13/22 22:04	1
Thallium	<0.0020		0.0020		mg/L		06/10/22 14:53	06/13/22 22:04	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00034		0.00020		mg/L		06/17/22 10:15	06/20/22 09:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	650		10		mg/L			06/10/22 04:53	1
Chloride	58		4.0		mg/L			06/10/22 10:37	2
Fluoride	0.27		0.10		mg/L			06/13/22 15:51	1
Sulfate	120		25		mg/L			06/13/22 10:17	5

Client Sample Results

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

Job ID: 500-217777-1

Client Sample ID: MW-10

Lab Sample ID: 500-217777-6

Date Collected: 06/07/22 15:30

Matrix: Water

Date Received: 06/08/22 17:43

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/10/22 14:53	06/13/22 22:07	1
Arsenic	0.0011		0.0010		mg/L		06/10/22 14:53	06/13/22 22:07	1
Barium	0.18		0.0025		mg/L		06/10/22 14:53	06/13/22 22:07	1
Beryllium	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 22:07	1
Boron	0.43		0.050		mg/L		06/10/22 14:53	06/14/22 15:59	1
Cadmium	<0.00050		0.00050		mg/L		06/10/22 14:53	06/13/22 22:07	1
Calcium	85		0.20		mg/L		06/10/22 14:53	06/13/22 22:07	1
Chromium	<0.0050		0.0050		mg/L		06/10/22 14:53	06/13/22 22:07	1
Cobalt	0.0028		0.0010		mg/L		06/10/22 14:53	06/13/22 22:07	1
Lead	<0.00050		0.00050		mg/L		06/10/22 14:53	06/13/22 22:07	1
Lithium	<0.010		0.010		mg/L		06/10/22 14:53	06/13/22 22:07	1
Molybdenum	<0.0050		0.0050		mg/L		06/10/22 14:53	06/13/22 22:07	1
Selenium	0.0049		0.0025		mg/L		06/10/22 14:53	06/13/22 22:07	1
Thallium	<0.0020		0.0020		mg/L		06/10/22 14:53	06/13/22 22:07	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/17/22 10:15	06/20/22 09:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	390		10		mg/L			06/10/22 04:56	1
Chloride	44		4.0		mg/L			06/10/22 10:37	2
Fluoride	0.21		0.10		mg/L			06/13/22 16:06	1
Sulfate	38		10		mg/L			06/13/22 10:18	2

Client Sample Results

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

Job ID: 500-217777-1

Client Sample ID: Duplicate

Lab Sample ID: 500-217777-7

Date Collected: 06/07/22 00:00

Matrix: Water

Date Received: 06/08/22 17:43

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		06/10/22 14:53	06/13/22 22:11	1
Arsenic	0.0016		0.0010		mg/L		06/10/22 14:53	06/13/22 22:11	1
Barium	0.063		0.0025		mg/L		06/10/22 14:53	06/13/22 22:11	1
Beryllium	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 22:11	1
Boron	0.23		0.050		mg/L		06/10/22 14:53	06/14/22 16:03	1
Cadmium	<0.00050		0.00050		mg/L		06/10/22 14:53	06/13/22 22:11	1
Calcium	86		0.20		mg/L		06/10/22 14:53	06/13/22 22:11	1
Chromium	<0.0050		0.0050		mg/L		06/10/22 14:53	06/13/22 22:11	1
Cobalt	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 22:11	1
Lead	<0.00050		0.00050		mg/L		06/10/22 14:53	06/13/22 22:11	1
Lithium	<0.010		0.010		mg/L		06/10/22 14:53	06/13/22 22:11	1
Molybdenum	0.0063		0.0050		mg/L		06/10/22 14:53	06/13/22 22:11	1
Selenium	<0.0025		0.0025		mg/L		06/10/22 14:53	06/13/22 22:11	1
Thallium	<0.0020		0.0020		mg/L		06/10/22 14:53	06/13/22 22:11	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		06/17/22 10:15	06/20/22 09:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	430		10		mg/L			06/10/22 04:58	1
Chloride	52		10		mg/L			06/10/22 10:37	5
Fluoride	0.16		0.10		mg/L			06/20/22 12:46	1
Sulfate	27		25		mg/L			06/13/22 10:18	5

Definitions/Glossary

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

Job ID: 500-217777-1

Qualifiers

Metals

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

Glossary

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

QC Association Summary

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

Job ID: 500-217777-1

Metals

Prep Batch: 660775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217777-1	MW-01	Total Recoverable	Water	3005A	
500-217777-2	MW-02	Total Recoverable	Water	3005A	
500-217777-3	MW-03	Total Recoverable	Water	3005A	
500-217777-4	MW-04	Total Recoverable	Water	3005A	
500-217777-5	MW-05	Total Recoverable	Water	3005A	
500-217777-6	MW-10	Total Recoverable	Water	3005A	
500-217777-7	Duplicate	Total Recoverable	Water	3005A	
MB 500-660775/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-660775/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-217777-1 MS	MW-01	Total Recoverable	Water	3005A	
500-217777-1 MSD	MW-01	Total Recoverable	Water	3005A	
500-217777-1 DU	MW-01	Total Recoverable	Water	3005A	

Analysis Batch: 661121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217777-1	MW-01	Total Recoverable	Water	6020A	660775
500-217777-2	MW-02	Total Recoverable	Water	6020A	660775
500-217777-3	MW-03	Total Recoverable	Water	6020A	660775
500-217777-4	MW-04	Total Recoverable	Water	6020A	660775
500-217777-5	MW-05	Total Recoverable	Water	6020A	660775
500-217777-6	MW-10	Total Recoverable	Water	6020A	660775
500-217777-7	Duplicate	Total Recoverable	Water	6020A	660775
MB 500-660775/1-A	Method Blank	Total Recoverable	Water	6020A	660775
LCS 500-660775/2-A	Lab Control Sample	Total Recoverable	Water	6020A	660775
500-217777-1 MS	MW-01	Total Recoverable	Water	6020A	660775
500-217777-1 MSD	MW-01	Total Recoverable	Water	6020A	660775
500-217777-1 DU	MW-01	Total Recoverable	Water	6020A	660775

Analysis Batch: 661300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217777-1	MW-01	Total Recoverable	Water	6020A	660775
500-217777-2	MW-02	Total Recoverable	Water	6020A	660775
500-217777-3	MW-03	Total Recoverable	Water	6020A	660775
500-217777-4	MW-04	Total Recoverable	Water	6020A	660775
500-217777-5	MW-05	Total Recoverable	Water	6020A	660775
500-217777-6	MW-10	Total Recoverable	Water	6020A	660775
500-217777-7	Duplicate	Total Recoverable	Water	6020A	660775
MB 500-660775/1-A	Method Blank	Total Recoverable	Water	6020A	660775
LCS 500-660775/2-A	Lab Control Sample	Total Recoverable	Water	6020A	660775
500-217777-1 MS	MW-01	Total Recoverable	Water	6020A	660775
500-217777-1 MSD	MW-01	Total Recoverable	Water	6020A	660775
500-217777-1 DU	MW-01	Total Recoverable	Water	6020A	660775

Prep Batch: 661703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217777-1	MW-01	Total/NA	Water	7470A	
500-217777-2	MW-02	Total/NA	Water	7470A	
500-217777-3	MW-03	Total/NA	Water	7470A	
500-217777-4	MW-04	Total/NA	Water	7470A	
500-217777-5	MW-05	Total/NA	Water	7470A	
500-217777-6	MW-10	Total/NA	Water	7470A	

Eurofins Chicago

QC Association Summary

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

Job ID: 500-217777-1

Metals (Continued)

Prep Batch: 661703 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217777-7	Duplicate	Total/NA	Water	7470A	
MB 500-661703/13-A	Method Blank	Total/NA	Water	7470A	
LCS 500-661703/12-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 662002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217777-1	MW-01	Total/NA	Water	7470A	661703
500-217777-2	MW-02	Total/NA	Water	7470A	661703
500-217777-3	MW-03	Total/NA	Water	7470A	661703
500-217777-4	MW-04	Total/NA	Water	7470A	661703
500-217777-5	MW-05	Total/NA	Water	7470A	661703
500-217777-6	MW-10	Total/NA	Water	7470A	661703
500-217777-7	Duplicate	Total/NA	Water	7470A	661703
MB 500-661703/13-A	Method Blank	Total/NA	Water	7470A	661703
LCS 500-661703/12-A	Lab Control Sample	Total/NA	Water	7470A	661703

General Chemistry

Analysis Batch: 660651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217777-1	MW-01	Total/NA	Water	SM 2540C	
500-217777-2	MW-02	Total/NA	Water	SM 2540C	
500-217777-3	MW-03	Total/NA	Water	SM 2540C	
500-217777-4	MW-04	Total/NA	Water	SM 2540C	
500-217777-5	MW-05	Total/NA	Water	SM 2540C	
500-217777-6	MW-10	Total/NA	Water	SM 2540C	
500-217777-7	Duplicate	Total/NA	Water	SM 2540C	
MB 500-660651/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-660651/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 660740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217777-1	MW-01	Total/NA	Water	SM 4500 CI- E	
500-217777-2	MW-02	Total/NA	Water	SM 4500 CI- E	
500-217777-3	MW-03	Total/NA	Water	SM 4500 CI- E	
500-217777-4	MW-04	Total/NA	Water	SM 4500 CI- E	
500-217777-5	MW-05	Total/NA	Water	SM 4500 CI- E	
500-217777-6	MW-10	Total/NA	Water	SM 4500 CI- E	
500-217777-7	Duplicate	Total/NA	Water	SM 4500 CI- E	
MB 500-660740/64	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-660740/65	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 660955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217777-1	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-217777-2	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-217777-3	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-217777-4	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-217777-5	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-217777-6	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-217777-7	Duplicate	Total/NA	Water	SM 4500 SO4 E	

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QC Association Summary

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

Job ID: 500-217777-1

General Chemistry (Continued)

Analysis Batch: 660955 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-660955/55	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-660955/56	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 661064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217777-1	MW-01	Total/NA	Water	SM 4500 F C	
500-217777-2	MW-02	Total/NA	Water	SM 4500 F C	
500-217777-3	MW-03	Total/NA	Water	SM 4500 F C	
500-217777-4	MW-04	Total/NA	Water	SM 4500 F C	
500-217777-5	MW-05	Total/NA	Water	SM 4500 F C	
500-217777-6	MW-10	Total/NA	Water	SM 4500 F C	
MB 500-661064/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-661064/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 662032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217777-7	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-662032/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-662032/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

QC Sample Results

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

Job ID: 500-217777-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-660775/1-A
Matrix: Water
Analysis Batch: 661121

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 660775

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0030		0.0030		mg/L		06/10/22 14:53	06/13/22 21:05	1
Arsenic	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 21:05	1
Barium	<0.0025		0.0025		mg/L		06/10/22 14:53	06/13/22 21:05	1
Beryllium	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 21:05	1
Cadmium	<0.00050		0.00050		mg/L		06/10/22 14:53	06/13/22 21:05	1
Calcium	<0.20		0.20		mg/L		06/10/22 14:53	06/13/22 21:05	1
Chromium	<0.0050		0.0050		mg/L		06/10/22 14:53	06/13/22 21:05	1
Cobalt	<0.0010		0.0010		mg/L		06/10/22 14:53	06/13/22 21:05	1
Lead	<0.00050		0.00050		mg/L		06/10/22 14:53	06/13/22 21:05	1
Lithium	<0.010		0.010		mg/L		06/10/22 14:53	06/13/22 21:05	1
Molybdenum	<0.0050		0.0050		mg/L		06/10/22 14:53	06/13/22 21:05	1
Selenium	<0.0025		0.0025		mg/L		06/10/22 14:53	06/13/22 21:05	1
Thallium	<0.0020		0.0020		mg/L		06/10/22 14:53	06/13/22 21:05	1

Lab Sample ID: MB 500-660775/1-A
Matrix: Water
Analysis Batch: 661300

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 660775

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Boron	<0.050		0.050		mg/L		06/10/22 14:53	06/14/22 15:16	1

Lab Sample ID: LCS 500-660775/2-A
Matrix: Water
Analysis Batch: 661121

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 660775

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.100	0.0937		mg/L		94	80 - 120
Barium	0.500	0.495		mg/L		99	80 - 120
Beryllium	0.0500	0.0475		mg/L		95	80 - 120
Cadmium	0.0500	0.0477		mg/L		95	80 - 120
Calcium	10.0	9.68		mg/L		97	80 - 120
Chromium	0.200	0.195		mg/L		98	80 - 120
Cobalt	0.500	0.492		mg/L		98	80 - 120
Lead	0.100	0.104		mg/L		104	80 - 120
Lithium	0.100	0.101		mg/L		101	80 - 120
Molybdenum	1.00	0.911		mg/L		91	80 - 120
Selenium	0.100	0.0950		mg/L		95	80 - 120
Thallium	0.100	0.105		mg/L		105	80 - 120

Lab Sample ID: LCS 500-660775/2-A
Matrix: Water
Analysis Batch: 661300

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 660775

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: 500-217777-1

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

Lab Sample ID: 500-217777-1 MS
Matrix: Water
Analysis Batch: 661121

Client Sample ID: MW-01
Prep Type: Total Recoverable
Prep Batch: 660775

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS	Unit	D	%Rec	%Rec	
	Result			Result	Qualifier				Limits	Limits
Antimony	<0.0030		0.500	0.503		mg/L		101	75 - 125	
Arsenic	<0.0010		0.100	0.0987		mg/L		98	75 - 125	
Barium	0.040		0.500	0.540		mg/L		100	75 - 125	
Beryllium	<0.0010		0.0500	0.0450		mg/L		90	75 - 125	
Cadmium	<0.00050		0.0500	0.0482		mg/L		96	75 - 125	
Calcium	81		10.0	89.0	4	mg/L		77	75 - 125	
Chromium	<0.0050		0.200	0.196		mg/L		98	75 - 125	
Cobalt	<0.0010		0.500	0.479		mg/L		96	75 - 125	
Lead	<0.00050		0.100	0.104		mg/L		104	75 - 125	
Lithium	<0.010		0.100	0.104		mg/L		104	75 - 125	
Molybdenum	0.0057		1.00	0.954		mg/L		95	75 - 125	
Selenium	<0.0025		0.100	0.101		mg/L		99	75 - 125	
Thallium	<0.0020		0.100	0.105		mg/L		105	75 - 125	

Lab Sample ID: 500-217777-1 MS
Matrix: Water
Analysis Batch: 661300

Client Sample ID: MW-01
Prep Type: Total Recoverable
Prep Batch: 660775

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS	Unit	D	%Rec	%Rec	
	Result			Result	Qualifier				Limits	Limits
Boron	0.21		1.00	1.06		mg/L		85	75 - 125	

Lab Sample ID: 500-217777-1 MSD
Matrix: Water
Analysis Batch: 661121

Client Sample ID: MW-01
Prep Type: Total Recoverable
Prep Batch: 660775

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result			Result	Qualifier				Limits	Limits	RPD	Limit
Antimony	<0.0030		0.500	0.508		mg/L		102	75 - 125	1	20	
Arsenic	<0.0010		0.100	0.0994		mg/L		99	75 - 125	1	20	
Barium	0.040		0.500	0.540		mg/L		100	75 - 125	0	20	
Beryllium	<0.0010		0.0500	0.0466		mg/L		93	75 - 125	3	20	
Cadmium	<0.00050		0.0500	0.0494		mg/L		99	75 - 125	2	20	
Calcium	81		10.0	89.1	4	mg/L		78	75 - 125	0	20	
Chromium	<0.0050		0.200	0.199		mg/L		99	75 - 125	1	20	
Cobalt	<0.0010		0.500	0.482		mg/L		96	75 - 125	1	20	
Lead	<0.00050		0.100	0.105		mg/L		105	75 - 125	1	20	
Lithium	<0.010		0.100	0.105		mg/L		105	75 - 125	1	20	
Molybdenum	0.0057		1.00	0.969		mg/L		96	75 - 125	2	20	
Selenium	<0.0025		0.100	0.101		mg/L		99	75 - 125	1	20	
Thallium	<0.0020		0.100	0.106		mg/L		106	75 - 125	1	20	

Lab Sample ID: 500-217777-1 MSD
Matrix: Water
Analysis Batch: 661300

Client Sample ID: MW-01
Prep Type: Total Recoverable
Prep Batch: 660775

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result			Result	Qualifier				Limits	Limits	RPD	Limit
Boron	0.21		1.00	1.07		mg/L		86	75 - 125	1	20	

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QC Sample Results

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

Job ID: 500-217777-1

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

Lab Sample ID: 500-217777-1 DU
Matrix: Water
Analysis Batch: 661121

Client Sample ID: MW-01
Prep Type: Total Recoverable
Prep Batch: 660775

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	<0.0030		<0.0030		mg/L		NC	20
Arsenic	<0.0010		<0.0010		mg/L		NC	20
Barium	0.040		0.0401		mg/L		0.5	20
Beryllium	<0.0010		<0.0010		mg/L		NC	20
Cadmium	<0.00050		<0.00050		mg/L		NC	20
Calcium	81		81.6		mg/L		0.3	20
Chromium	<0.0050		<0.0050		mg/L		NC	20
Cobalt	<0.0010		<0.0010		mg/L		NC	20
Lead	<0.00050		<0.00050		mg/L		NC	20
Lithium	<0.010		<0.010		mg/L		NC	20
Molybdenum	0.0057		0.00559		mg/L		1	20
Selenium	<0.0025		<0.0025		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Lab Sample ID: 500-217777-1 DU
Matrix: Water
Analysis Batch: 661300

Client Sample ID: MW-01
Prep Type: Total Recoverable
Prep Batch: 660775

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Boron	0.21		0.206		mg/L		3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-661703/13-A
Matrix: Water
Analysis Batch: 662002

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 661703

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020		mg/L		06/17/22 10:15	06/20/22 09:16	1

Lab Sample ID: LCS 500-661703/12-A
Matrix: Water
Analysis Batch: 662002

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 661703

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

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

Lab Sample ID: MB 500-660651/1
Matrix: Water
Analysis Batch: 660651

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Dissolved Solids	<10		10		mg/L			06/10/22 04:25	1

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QC Sample Results

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

Job ID: 500-217777-1

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

Lab Sample ID: LCS 500-660651/2
Matrix: Water
Analysis Batch: 660651

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	268		mg/L		107	80 - 120

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-660740/64
Matrix: Water
Analysis Batch: 660740

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			06/10/22 10:16	1

Lab Sample ID: LCS 500-660740/65
Matrix: Water
Analysis Batch: 660740

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	20.5		mg/L		103	85 - 115

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-661064/31
Matrix: Water
Analysis Batch: 661064

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			06/13/22 14:55	1

Lab Sample ID: LCS 500-661064/32
Matrix: Water
Analysis Batch: 661064

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	10.4		mg/L		104	90 - 119

Lab Sample ID: MB 500-662032/3
Matrix: Water
Analysis Batch: 662032

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			06/20/22 11:55	1

Lab Sample ID: LCS 500-662032/4
Matrix: Water
Analysis Batch: 662032

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	10.7		mg/L		107	90 - 119

QC Sample Results

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

Job ID: 500-217777-1

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-660955/55
Matrix: Water
Analysis Batch: 660955

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			06/13/22 09:56	1

Lab Sample ID: LCS 500-660955/56
Matrix: Water
Analysis Batch: 660955

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	22.0		mg/L		110	88 - 123

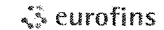


Eurofins Chicago

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

Chain of Custody Record

MKE 232



En on stl

Client Information			Sampler		Lab PM		Carrier Tracking No(s)			COC No						
Client Contact Mitchel Dolan			Mitchel Dolan		Mockler Diana J					500-101316-44025 1						
Company KPRG and Associates Inc.			Phone 262-622-1143		E-Mail Diana.Mockler@et.eurofins.com		State of Origin IL			Page Page 1 of 1						
Address 14665 West L sbon Road Suite 1A			Due Date Requested			Analysis Requested						Job # 500-217277				
City Brookfield			TAT Requested (days)			903.0 Standard Target List Ra226Ra228_GGPC Local Method 904.0 Standard Target List 6020A 7470A 2540C 4500_F_C_SMA4500 Cl_E_SMA4500 SO4_E						Preservation Codes A HCL M Hexane B NaOH N None C AsNaO2 C AsNaO2 D Zn Acetate P Na2O4S E Nitric Acid Q Na2SO4 F NaHSO4 R Na2S2O3 G MeOH S H2SO4 H Amchlor T TSP Dodecayd ate I Ice U Aceto e J DI Water V MCAA K EDTA W pH 4-5 L EDA Y izma Z other (specify)		Other:		
State Zip WI 53005			Compliance Project <input type="checkbox"/> Yes <input type="checkbox"/> No													
Phone 262 781-0475(Tel)			PO # 4502081030													
Email mitcheld@kprginc.com			*VO #													
Project Name Powerton CCR FAB			Project # 50011612													
Site Illinois			SSOW#													
Sample Identification					Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil)	Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)					Total Number of Containers	Special Instructions/Note	
										D	D	D	D	N		
MW-01					6/7/22	1432	G	Water	N	N	X	X	X	X		
MW-02					6/7/22	1254	G	Water	N	N	X	X	X	X		
MW-03					6/7/22	1200	G	Water	N	N	X	X	X	X		
MW-04					6/7/22	1110	G	Water	N	N	X	X	X	X		
MW-05					6/7/22	1018	G	Water	N	N	X	X	X	X		
MW-06					6/7/22	1530	G	Water	N	N	X	X	X	X		
Duplicate FAB					6/7/22	-	G	Water	N	N	X	X	X	X		
Possible Hazard Identification <input 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 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 Relinquished by MPD			Date/Time 6/7/22 /1800		Company KPRG		Received by FEDEX			Date/Time 6/7/22 /1800		Company FEDEX				
Relinquished by			Date/Time 6/8/22 1645		Company KPRG		Received by John Smith			Date/Time 6/8/22 1645		Company KPRG				
Relinquished by			Date/Time		Company		Received by			Date/Time		Company				
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No			Custody Seal No		Cooler Temperature(s) 'C and Other Remarks 23 → 0.9, 29 → 1.5, 1.4 → 0.9											



ORIGIN ID:PIAA (262) 622-1143
MITCHEL DOLAN
KPRG AND ASSOCIATES
414 PLAZA DR STE 106

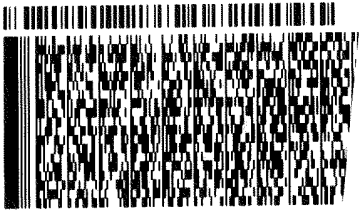
WESTMONT, IL 60559
UNITED STATES US

TO

TEST AMERICA
2417 BOND ST

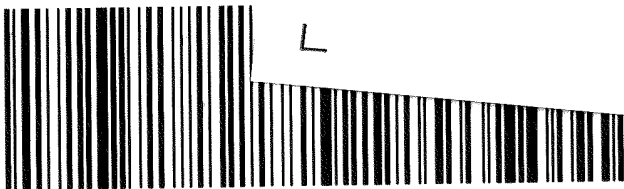
UNIVERSITY PARK IL

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



1 of 9
TRK# 2740 5878 9062
0201
MASTER

UF JOTA



PK STE 106
WESTMONT, IL 60559
UNITED STATES US

ACTWT: 46.40 LB
CAD: 6994780/SSFE2321
DIMS: 24x17x12 IN

BILL THIRD PARTY

TO

TEST AMERICA
2417 BOND ST

UNIVERSITY PARK IL 60484

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



FedEx
Express



6 of 9
MPS# 2740 5878 9110
0263
Mstr# 2740 5878 9062

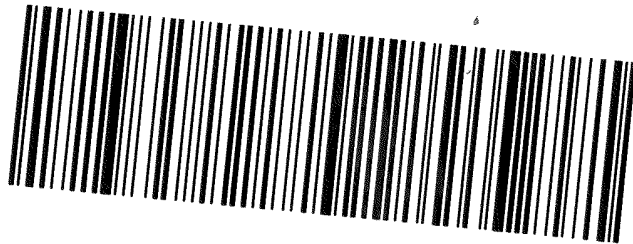
UF JOTA

0201

WED - 08 JUN 4:30P
STANDARD OVERNIGHT

AHS
60484

IL-US ORD



PIAA (262) 622-1143
MITCHEL DOLAN
KPRG AND ASSOCIATES
414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

TO

TEST AMERICA
2417 BOND ST

UNIVERSITY PARK IL 60484

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

SHIP DATE: 07JUN22
ACTWT: 46.40 LB
CAD: 6994780/SSFE2321
DIMS: 24x17x12 IN

BILL THIRD PARTY



500-217777 Wayb.



FedEx
Express



3 of 9
MPS# 2740 5878 9084
0263
Mstr# 2740 5878 9062

UF JOTA

0201

WED - 08 JUN 4:30P
STANDARD OVERNIGHT

AHS
60484

IL-US ORD



1
2
3
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8
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10
11
12
13

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-217777-1

Login Number: 217777

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	0.9,1.5,0.9
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: 500-217777-1

Client Sample ID: MW-01
Date Collected: 06/07/22 14:32
Date Received: 06/08/22 17:43

Lab Sample ID: 500-217777-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			660775	06/10/22 14:53	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	661121	06/13/22 21:29	FXG	TAL CHI
Total Recoverable	Prep	3005A			660775	06/10/22 14:53	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	661300	06/14/22 15:22	FXG	TAL CHI
Total/NA	Prep	7470A			661703	06/17/22 10:15	MJG	TAL CHI
Total/NA	Analysis	7470A		1	662002	06/20/22 09:18	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	660651	06/10/22 04:43	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	660740	06/10/22 10:20	LP	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	661064	06/13/22 15:38	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	660955	06/13/22 10:16	LP	TAL CHI

Client Sample ID: MW-02
Date Collected: 06/07/22 12:54
Date Received: 06/08/22 17:43

Lab Sample ID: 500-217777-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			660775	06/10/22 14:53	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	661121	06/13/22 21:54	FXG	TAL CHI
Total Recoverable	Prep	3005A			660775	06/10/22 14:53	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	661300	06/14/22 15:39	FXG	TAL CHI
Total/NA	Prep	7470A			661703	06/17/22 10:15	MJG	TAL CHI
Total/NA	Analysis	7470A		1	662002	06/20/22 09:21	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	660651	06/10/22 04:45	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	660740	06/10/22 10:20	LP	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	661064	06/13/22 15:42	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	660955	06/13/22 10:16	LP	TAL CHI

Client Sample ID: MW-03
Date Collected: 06/07/22 12:00
Date Received: 06/08/22 17:43

Lab Sample ID: 500-217777-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			660775	06/10/22 14:53	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	661121	06/13/22 21:57	FXG	TAL CHI
Total Recoverable	Prep	3005A			660775	06/10/22 14:53	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	661300	06/14/22 15:43	FXG	TAL CHI
Total/NA	Prep	7470A			661703	06/17/22 10:15	MJG	TAL CHI
Total/NA	Analysis	7470A		1	662002	06/20/22 09:23	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	660651	06/10/22 04:48	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	660740	06/10/22 10:20	LP	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	661064	06/13/22 15:45	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	660955	06/13/22 10:17	LP	TAL CHI

Lab Chronicle

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

Job ID: 500-217777-1

Client Sample ID: MW-04
Date Collected: 06/07/22 11:10
Date Received: 06/08/22 17:43

Lab Sample ID: 500-217777-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			660775	06/10/22 14:53	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	661121	06/13/22 22:00	FXG	TAL CHI
Total Recoverable	Prep	3005A			660775	06/10/22 14:53	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	661300	06/14/22 15:46	FXG	TAL CHI
Total/NA	Prep	7470A			661703	06/17/22 10:15	MJG	TAL CHI
Total/NA	Analysis	7470A		1	662002	06/20/22 09:25	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	660651	06/10/22 04:50	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	660740	06/10/22 10:21	LP	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	661064	06/13/22 15:48	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	660955	06/13/22 10:17	LP	TAL CHI

Client Sample ID: MW-05
Date Collected: 06/07/22 10:18
Date Received: 06/08/22 17:43

Lab Sample ID: 500-217777-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			660775	06/10/22 14:53	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	661121	06/13/22 22:04	FXG	TAL CHI
Total Recoverable	Prep	3005A			660775	06/10/22 14:53	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	661300	06/14/22 15:56	FXG	TAL CHI
Total/NA	Prep	7470A			661703	06/17/22 10:15	MJG	TAL CHI
Total/NA	Analysis	7470A		1	662002	06/20/22 09:27	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	660651	06/10/22 04:53	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	660740	06/10/22 10:37	LP	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	661064	06/13/22 15:51	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	660955	06/13/22 10:17	LP	TAL CHI

Client Sample ID: MW-10
Date Collected: 06/07/22 15:30
Date Received: 06/08/22 17:43

Lab Sample ID: 500-217777-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			660775	06/10/22 14:53	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	661121	06/13/22 22:07	FXG	TAL CHI
Total Recoverable	Prep	3005A			660775	06/10/22 14:53	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	661300	06/14/22 15:59	FXG	TAL CHI
Total/NA	Prep	7470A			661703	06/17/22 10:15	MJG	TAL CHI
Total/NA	Analysis	7470A		1	662002	06/20/22 09:29	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	660651	06/10/22 04:56	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		2	660740	06/10/22 10:37	LP	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	661064	06/13/22 16:06	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	660955	06/13/22 10:18	LP	TAL CHI

Lab Chronicle

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

Job ID: 500-217777-1

Client Sample ID: Duplicate

Lab Sample ID: 500-217777-7

Date Collected: 06/07/22 00:00

Matrix: Water

Date Received: 06/08/22 17:43

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total Recoverable	Prep	3005A			660775	06/10/22 14:53	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	661121	06/13/22 22:11	FXG	TAL CHI
Total Recoverable	Prep	3005A			660775	06/10/22 14:53	LMB	TAL CHI
Total Recoverable	Analysis	6020A		1	661300	06/14/22 16:03	FXG	TAL CHI
Total/NA	Prep	7470A			661703	06/17/22 10:15	MJG	TAL CHI
Total/NA	Analysis	7470A		1	662002	06/20/22 09:31	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	660651	06/10/22 04:58	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	660740	06/10/22 10:37	LP	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	662032	06/20/22 12:46	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	660955	06/13/22 10:18	LP	TAL CHI

Laboratory References:

TAL 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: 500-217777-1

Laboratory: Eurofins Chicago

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

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

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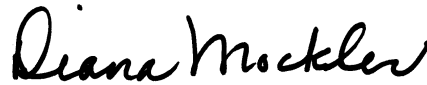
ANALYTICAL REPORT

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

Laboratory Job ID: 500-217777-2
Client Project/Site: Powerton CCR FAB (RAD)

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

Attn: Richard Gnat



Authorized for release by:
7/11/2022 11:07:39 AM

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

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

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



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Case Narrative

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

Job ID: 500-217777-2

Job ID: 500-217777-2

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-217777-2

Comments

No additional comments.

Receipt

The samples were received on 6/8/2022 5:43 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.9° C, 0.9° C and 1.5° C.

RAD

Method 903.0: Radium-226 batch 570311

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

MW-01 (500-217777-1), MW-02 (500-217777-2), MW-03 (500-217777-3), MW-04 (500-217777-4), MW-05 (500-217777-5), MW-10 (500-217777-6), Duplicate (500-217777-7), (LCS 160-570311/2-A), (MB 160-570311/1-A) and (500-217777-D-1-A DU)

Methods 904.0, 9320, SM7110C, ST-RC-0058: Radium-228 batch 570316

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

MW-01 (500-217777-1), MW-02 (500-217777-2), MW-03 (500-217777-3), MW-04 (500-217777-4), MW-05 (500-217777-5), MW-10 (500-217777-6), Duplicate (500-217777-7), (CCB 160-571384/49), (CCB 160-571384/52), (CCB 160-571384/57), (CCB 160-571384/58), (CCB 160-571384/61), (CCB 160-571384/62), (CCB 160-571384/63), (CCB 160-571384/64), (CCB 160-571384/65), (CCB 160-571384/66), (CCVA 160-571384/1), (CCVA 160-571384/12), (CCVA 160-571384/2), (CCVA 160-571384/33), (CCVA 160-571384/34), (CCVA 160-571384/37), (CCVA 160-571384/38), (CCVA 160-571384/39), (CCVA 160-571384/40), (CCVA 160-571384/9), (CCVB 160-571384/17), (CCVB 160-571384/18), (CCVB 160-571384/21), (CCVB 160-571384/22), (CCVB 160-571384/23), (CCVB 160-571384/24), (CCVB 160-571384/25), (CCVB 160-571384/28), (CCVB 160-571384/41), (CCVB 160-571384/42), (LCS 160-570316/2-A), (MB 160-570316/1-A) and (500-217777-D-1-B DU)

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

Method Summary

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

Job ID: 500-217777-2

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

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

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

Sample Summary

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

Job ID: 500-217777-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-217777-1	MW-01	Water	06/07/22 14:32	06/08/22 17:43
500-217777-2	MW-02	Water	06/07/22 12:54	06/08/22 17:43
500-217777-3	MW-03	Water	06/07/22 12:00	06/08/22 17:43
500-217777-4	MW-04	Water	06/07/22 11:10	06/08/22 17:43
500-217777-5	MW-05	Water	06/07/22 10:18	06/08/22 17:43
500-217777-6	MW-10	Water	06/07/22 15:30	06/08/22 17:43
500-217777-7	Duplicate	Water	06/07/22 00:00	06/08/22 17:43

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Client Sample Results

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

Job ID: 500-217777-2

Client Sample ID: MW-01

Lab Sample ID: 500-217777-1

Date Collected: 06/07/22 14:32

Matrix: Water

Date Received: 06/08/22 17:43

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0666	U	0.0566	0.0569	1.00	0.0825	pCi/L	06/16/22 14:09	07/08/22 11:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					06/16/22 14:09	07/08/22 11:40	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.464		0.289	0.292	1.00	0.417	pCi/L	06/16/22 14:40	06/23/22 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					06/16/22 14:40	06/23/22 12:07	1
Y Carrier	86.4		40 - 110					06/16/22 14:40	06/23/22 12:07	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.531		0.294	0.297	5.00	0.417	pCi/L		07/11/22 10:32	1

Client Sample Results

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

Job ID: 500-217777-2

Client Sample ID: MW-02
Date Collected: 06/07/22 12:54
Date Received: 06/08/22 17:43

Lab Sample ID: 500-217777-2
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0134	U	0.0608	0.0608	1.00	0.116	pCi/L	06/16/22 14:09	07/08/22 11:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					06/16/22 14:09	07/08/22 11:40	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.651		0.359	0.364	1.00	0.511	pCi/L	06/16/22 14:40	06/23/22 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					06/16/22 14:40	06/23/22 12:07	1
Y Carrier	85.2		40 - 110					06/16/22 14:40	06/23/22 12:07	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.665		0.364	0.369	5.00	0.511	pCi/L		07/11/22 10:32	1

Client Sample Results

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

Job ID: 500-217777-2

Client Sample ID: MW-03

Lab Sample ID: 500-217777-3

Date Collected: 06/07/22 12:00

Matrix: Water

Date Received: 06/08/22 17:43

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0102	U	0.0505	0.0505	1.00	0.0999	pCi/L	06/16/22 14:09	07/08/22 11:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.0		40 - 110					06/16/22 14:09	07/08/22 11:40	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.841		0.397	0.405	1.00	0.543	pCi/L	06/16/22 14:40	06/23/22 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.0		40 - 110					06/16/22 14:40	06/23/22 12:07	1
Y Carrier	86.7		40 - 110					06/16/22 14:40	06/23/22 12:07	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.851		0.400	0.408	5.00	0.543	pCi/L		07/11/22 10:32	1

Client Sample Results

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

Job ID: 500-217777-2

Client Sample ID: MW-04
Date Collected: 06/07/22 11:10
Date Received: 06/08/22 17:43

Lab Sample ID: 500-217777-4
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0237	U	0.0500	0.0500	1.00	0.0915	pCi/L	06/16/22 14:09	07/08/22 11:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.3		40 - 110					06/16/22 14:09	07/08/22 11:40	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.327	U	0.299	0.301	1.00	0.473	pCi/L	06/16/22 14:40	06/23/22 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.3		40 - 110					06/16/22 14:40	06/23/22 12:07	1
Y Carrier	86.4		40 - 110					06/16/22 14:40	06/23/22 12:07	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.350	U	0.303	0.305	5.00	0.473	pCi/L		07/11/22 10:32	1

Client Sample Results

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

Job ID: 500-217777-2

Client Sample ID: MW-05

Lab Sample ID: 500-217777-5

Date Collected: 06/07/22 10:18

Matrix: Water

Date Received: 06/08/22 17:43

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0448	U	0.0534	0.0536	1.00	0.0871	pCi/L	06/16/22 14:09	07/08/22 13:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.8		40 - 110					06/16/22 14:09	07/08/22 13:57	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.176	U	0.275	0.275	1.00	0.468	pCi/L	06/16/22 14:40	06/23/22 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.8		40 - 110					06/16/22 14:40	06/23/22 12:08	1
Y Carrier	84.1		40 - 110					06/16/22 14:40	06/23/22 12:08	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.220	U	0.280	0.280	5.00	0.468	pCi/L		07/11/22 10:32	1

Client Sample Results

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

Job ID: 500-217777-2

Client Sample ID: MW-10

Lab Sample ID: 500-217777-6

Date Collected: 06/07/22 15:30

Matrix: Water

Date Received: 06/08/22 17:43

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.189		0.0883	0.0899	1.00	0.0996	pCi/L	06/16/22 14:09	07/08/22 13:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.5		40 - 110					06/16/22 14:09	07/08/22 13:57	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.498	U	0.364	0.367	1.00	0.552	pCi/L	06/16/22 14:40	06/23/22 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.5		40 - 110					06/16/22 14:40	06/23/22 12:08	1
Y Carrier	86.7		40 - 110					06/16/22 14:40	06/23/22 12:08	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.687		0.375	0.378	5.00	0.552	pCi/L		07/11/22 10:32	1

Client Sample Results

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

Job ID: 500-217777-2

Client Sample ID: Duplicate

Lab Sample ID: 500-217777-7

Date Collected: 06/07/22 00:00

Matrix: Water

Date Received: 06/08/22 17:43

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0509	U	0.0786	0.0788	1.00	0.136	pCi/L	06/16/22 14:09	07/08/22 13:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	54.0		40 - 110					06/16/22 14:09	07/08/22 13:57	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0755	U	0.437	0.437	1.00	0.801	pCi/L	06/16/22 14:40	06/23/22 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	54.0		40 - 110					06/16/22 14:40	06/23/22 12:08	1
Y Carrier	86.0		40 - 110					06/16/22 14:40	06/23/22 12:08	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.126	U	0.444	0.444	5.00	0.801	pCi/L		07/11/22 10:32	1

Definitions/Glossary

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

Job ID: 500-217777-2

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: 500-217777-2

Rad

Prep Batch: 570311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217777-1	MW-01	Total/NA	Water	PrecSep-21	
500-217777-2	MW-02	Total/NA	Water	PrecSep-21	
500-217777-3	MW-03	Total/NA	Water	PrecSep-21	
500-217777-4	MW-04	Total/NA	Water	PrecSep-21	
500-217777-5	MW-05	Total/NA	Water	PrecSep-21	
500-217777-6	MW-10	Total/NA	Water	PrecSep-21	
500-217777-7	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-570311/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-570311/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-217777-1 DU	MW-01	Total/NA	Water	PrecSep-21	

Prep Batch: 570316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-217777-1	MW-01	Total/NA	Water	PrecSep_0	
500-217777-2	MW-02	Total/NA	Water	PrecSep_0	
500-217777-3	MW-03	Total/NA	Water	PrecSep_0	
500-217777-4	MW-04	Total/NA	Water	PrecSep_0	
500-217777-5	MW-05	Total/NA	Water	PrecSep_0	
500-217777-6	MW-10	Total/NA	Water	PrecSep_0	
500-217777-7	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-570316/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-570316/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-217777-1 DU	MW-01	Total/NA	Water	PrecSep_0	

QC Sample Results

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

Job ID: 500-217777-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-570311/1-A
Matrix: Water
Analysis Batch: 573267

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 570311

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.009749	U	0.0508	0.0508	1.00	0.0988	pCi/L	06/16/22 14:09	07/08/22 11:39	1
Carrier	MB	MB	Limits			Prepared	Analyzed	Dil Fac		
	%Yield	Qualifier								
Ba Carrier	93.3		40 - 110			06/16/22 14:09	07/08/22 11:39	1		

Lab Sample ID: LCS 160-570311/2-A
Matrix: Water
Analysis Batch: 573267

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 570311

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	9.944		1.03	1.00	0.0731	pCi/L	88	75 - 125
Carrier	LCS	LCS	Limits			Prepared	Analyzed	Dil Fac	
	%Yield	Qualifier							
Ba Carrier	101		40 - 110						

Lab Sample ID: 500-217777-1 DU
Matrix: Water
Analysis Batch: 573267

Client Sample ID: MW-01
Prep Type: Total/NA
Prep Batch: 570311

Analyte	Sample	Sample	DU	DU	Total	RL	MDC	Unit	RER	RER
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					Limit
Radium-226	0.0666	U	-0.00340	U	0.0406	1.00	0.0890	pCi/L	0.72	1
Carrier	DU	DU	Limits			Prepared	Analyzed	Dil Fac		
	%Yield	Qualifier								
Ba Carrier	91.0		40 - 110							

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-570316/1-A
Matrix: Water
Analysis Batch: 571384

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 570316

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.3472	U	0.304	0.305	1.00	0.479	pCi/L	06/16/22 14:40	06/23/22 12:07	1
Carrier	MB	MB	Limits			Prepared	Analyzed	Dil Fac		
	%Yield	Qualifier								
Ba Carrier	93.3		40 - 110			06/16/22 14:40	06/23/22 12:07	1		
Y Carrier	86.4		40 - 110			06/16/22 14:40	06/23/22 12:07	1		

QC Sample Results

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

Job ID: 500-217777-2

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

Lab Sample ID: LCS 160-570316/2-A
Matrix: Water
Analysis Batch: 571384

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 570316

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
Radium-228	8.51	8.878		1.17	1.00	0.454	pCi/L	104	75 - 125	
LCS LCS										
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	101		40 - 110							
Y Carrier	85.6		40 - 110							

Lab Sample ID: 500-217777-1 DU
Matrix: Water
Analysis Batch: 571384

Client Sample ID: MW-01
Prep Type: Total/NA
Prep Batch: 570316

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
										1
Radium-228	0.464		0.7084		0.333	1.00	0.426	pCi/L	0.39	1
DU DU										
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	91.0		40 - 110							
Y Carrier	85.2		40 - 110							

Eurofins Chicago

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

Chain of Custody Record

MKE 232

eurofins En on stl

Client Information			Sampler <i>Mitchel Dolan</i>	Lab PM Mockler Diana J	Carrier Tracking No(s)	COC No 500-101316-44025 1									
Client Contact Mitchel Dolan			Phone <i>262-622-1143</i>	E-Mail Diana.Mockler@et.eurofins.com	State of Origin <i>IL</i>	Page Page 1 of 1									
Company KPRG and Associates Inc.			PWSID	Analysis Requested											
Address 14665 West Lsbon Road Suite 1A			Due Date Requested	Job # <i>500-217277</i>											
City Brookfield			TAT Requested (days)	Preservation Codes											
State Zip WI 53005			Compliance Project <input type="checkbox"/> Yes <input type="checkbox"/> No	A HCL M Hexane B NaOH N None C Zn Acetate C AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO4 F MeOH R Na2S2O3 G Amchlor S H2Sx.4 H Ascorbic Acid T TSF Dodecahyd ate I Ice U Aceto e J DI Water V MCAA K EDTA W pH 4-5 L EDA Y T izma Z other (specify)											
Phone 262 781-0475(Tel) 500-217777 COC			PO # 4502081030	Total Number of Containers: 903.0 Standard Target List Ra226Ra228_GGPC Local Method 904.0 Standard Target List 6020A 7470A 2540C 4500_F_C_SMA4500 Cl_E_SMA4500 SO4_E											
Email mitcheld@kprginc.com			AVO #												
Project Name Powerton CCR <i>FAB</i>			Project # 50011612	Other:											
Site Illinois			SSOW#												
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=soil, O=waste/oil, BT=Tissue, AnAir)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Special Instructions/Note							
								Preservation Code: D D D D N							
1	MW-01	6/7/22	1432	G	Water	N	N	X	X	X	X	X			
2	MW-02	6/7/22	1254	G	Water	N	N	X	X	X	X	X			
3	MW-03	6/7/22	1200	G	Water	N	N	X	X	X	X	X			
4	MW-04	6/7/22	1110	G	Water	N	N	X	X	X	X	X			
5	MW-05	6/7/22	1018	G	Water	N	N	X	X	X	X	X			
6	MW-06	6/7/22	1530	G	Water	N	N	X	X	X	X	X			
7	Duplicate FAB	6/7/22	-	G	Water	N	N	X	X	X	X	X			
Possible Hazard Identification							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)								
<input 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 type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months								
Deliverable Requested I II III IV Other (specify)							Special Instructions/QC Requirements								
Empty Kit Relinquished by			Date	Time	Method of Shipment										
Relinquished by <i>MPO</i>			Date/Time <i>6/7/22 /1800</i>	Company <i>KPRG</i>	Received by <i>FEDEX</i>		Date/Time <i>6/7/22 /1800</i>	Company <i>FEDEX</i>							
Relinquished by			Date/Time	Company	Received by <i>Shirley Smith</i>		Date/Time <i>6/8/22 1645</i>	Company <i>BRIT</i>							
Relinquished by			Date/Time	Company	Received by		Date/Time	Company							
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No			Custody Seal No		Cooler Temperature(s) °C and Other Remarks <i>23 → 20.9, 22 → 15, 14 → 8.9</i>										

ORIGIN ID:PIAA (262) 622-1143
MITCHEL DOLAN
KPRG AND ASSOCIATES
414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

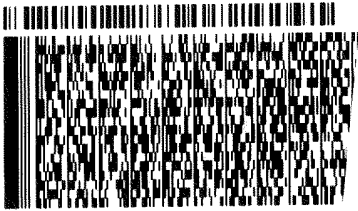
TO

TEST AMERICA
2417 BOND ST

UNIVERSITY PARK IL

(000) 000-0000 REF:

INU:
PO:



1 of 9
TRK# 2740 5878 9062
0201
MASTER

UF JOTA



PK STE 106
WESTMONT, IL 60559
UNITED STATES US

ACTWT: 46.40 LB
CAD: 6994780/SSFE2321
DIMS: 24x17x12 IN
BILL THIRD PARTY

TO

TEST AMERICA
2417 BOND ST

UNIVERSITY PARK IL 60484

(000) 000-0000 REF:

INU:
PO:



FedEx
Express



6 of 9
MPS# 2740 5878 9110
0263
Mstr# 2740 5878 9062

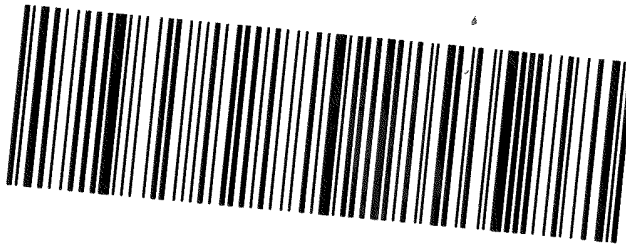
UF JOTA

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WED - 08 JUN 4:30P
STANDARD OVERNIGHT

AHS
60484

IL-US ORD



PIAA (262) 622-1143
DOLAN
KPRG AND ASSOCIATES
414 PLAZA DR STE 106

SHIP DATE: 07JUN22
ACTWT: 46.40 LB
CAD: 6994780/SSFE2321
DIMS: 24x17x12 IN

TO

TEST AMERICA
2417 BOND ST

UNIVERSITY PARK IL 60484

(000) 000-0000 REF:

INU:
PO:



FedEx
Express



3 of 9
MPS# 2740 5878 9084
0263
Mstr# 2740 5878 9062

UF JOTA

0201

WED - 08 JUN 4:30P
STANDARD OVERNIGHT

AHS
60484

IL-US ORD





Client Information (Sub Contract Lab)		Sampler: Lab PM: Mockler, Diana J		COC No: 500-161850-1	
Shipping/Receiving		E-Mail: Diana.Mockler@et.eurofins.com		Page: Page 1 of 1	
Company: TestAmerica Laboratories, Inc.		Address: 13715 Rider Trail North, Earth City, MO, 63045		Job #: 500-217777-2	
Due Date Requested: 6/28/2022		TAT Requested (days):		Preservation Codes:	
PO #: 314-298-8566(Tel) 314-298-8757(Fax)		WO #:		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)	
Project #: 50011612		SSOW#:		Analysis Requested	
Site: MWG - Powerton		Sample Date		Total Number of Containers	
Sample Identification - Client ID (Lab ID)		Sample Time		Special Instructions/Note:	
MW-01 (500-217777-1)	6/7/22	14:32 Central	Water	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-02 (500-217777-2)	6/7/22	12:54 Central	Water	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-03 (500-217777-3)	6/7/22	12:00 Central	Water	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-04 (500-217777-4)	6/7/22	11:10 Central	Water	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-05 (500-217777-5)	6/7/22	10:18 Central	Water	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-10 (500-217777-6)	6/7/22	15:30 Central	Water	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
Duplicate (500-217777-7)	6/7/22	Central	Water	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no

903.0/PreSep_21 Standard Target List
904.0/PreSep_0 Standard Target List
R4226Ra228_GPC

Field Filtered Sample (Yes or No)
Perform MS/MSD (Yes or No)
903.0/PreSep_21 Standard Target List
904.0/PreSep_0 Standard Target List
R4226Ra228_GPC

Field Filtered Sample (Yes or No)
Perform MS/MSD (Yes or No)
903.0/PreSep_21 Standard Target List
904.0/PreSep_0 Standard Target List
R4226Ra228_GPC

Field Filtered Sample (Yes or No)
Perform MS/MSD (Yes or No)
903.0/PreSep_21 Standard Target List
904.0/PreSep_0 Standard Target List
R4226Ra228_GPC

Field Filtered Sample (Yes or No)
Perform MS/MSD (Yes or No)
903.0/PreSep_21 Standard Target List
904.0/PreSep_0 Standard Target List
R4226Ra228_GPC

Field Filtered Sample (Yes or No)
Perform MS/MSD (Yes or No)
903.0/PreSep_21 Standard Target List
904.0/PreSep_0 Standard Target List
R4226Ra228_GPC

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)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:

Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____
 Relinquished by: *Ann Stots* Date: *6/9/22* Time: *1500* Company: *FEDEX*
 Relinquished by: _____ Date: _____ Time: _____ Company: _____
 Relinquished by: _____ Date: _____ Time: _____ Company: _____
 Custody Seals Intact: _____ Custody Seal No.: _____
 Δ Yes Δ No
 Received by: _____ Date/Time: _____
 Received by: *Sana Worthington* Date/Time: *10/10/2022 0900* Company: *GRASS*
 Received by: _____ Date/Time: _____ Company: _____
 Cooler Temperature(s) °C and Other Remarks:



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-217777-2

Login Number: 217777

List Number: 1

Creator: Scott, Sherri L

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9,1.5,0.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-217777-2

Login Number: 217777

List Number: 2

Creator: Worthington, Sierra M

List Source: Eurofins St. Louis

List Creation: 06/10/22 12:05 PM

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	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Lab Chronicle

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

Job ID: 500-217777-2

Client Sample ID: MW-01

Date Collected: 06/07/22 14:32

Date Received: 06/08/22 17:43

Lab Sample ID: 500-217777-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			570311	06/16/22 14:09	MS	TAL SL
Total/NA	Analysis	903.0		1	573267	07/08/22 11:40	EMH	TAL SL
Total/NA	Prep	PrecSep_0			570316	06/16/22 14:40	MS	TAL SL
Total/NA	Analysis	904.0		1	571384	06/23/22 12:07	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	573390	07/11/22 10:32	CAH	TAL SL

Client Sample ID: MW-02

Date Collected: 06/07/22 12:54

Date Received: 06/08/22 17:43

Lab Sample ID: 500-217777-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			570311	06/16/22 14:09	MS	TAL SL
Total/NA	Analysis	903.0		1	573267	07/08/22 11:40	EMH	TAL SL
Total/NA	Prep	PrecSep_0			570316	06/16/22 14:40	MS	TAL SL
Total/NA	Analysis	904.0		1	571384	06/23/22 12:07	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	573390	07/11/22 10:32	CAH	TAL SL

Client Sample ID: MW-03

Date Collected: 06/07/22 12:00

Date Received: 06/08/22 17:43

Lab Sample ID: 500-217777-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			570311	06/16/22 14:09	MS	TAL SL
Total/NA	Analysis	903.0		1	573267	07/08/22 11:40	EMH	TAL SL
Total/NA	Prep	PrecSep_0			570316	06/16/22 14:40	MS	TAL SL
Total/NA	Analysis	904.0		1	571384	06/23/22 12:07	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	573390	07/11/22 10:32	CAH	TAL SL

Client Sample ID: MW-04

Date Collected: 06/07/22 11:10

Date Received: 06/08/22 17:43

Lab Sample ID: 500-217777-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			570311	06/16/22 14:09	MS	TAL SL
Total/NA	Analysis	903.0		1	573267	07/08/22 11:40	EMH	TAL SL
Total/NA	Prep	PrecSep_0			570316	06/16/22 14:40	MS	TAL SL
Total/NA	Analysis	904.0		1	571384	06/23/22 12:07	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	573390	07/11/22 10:32	CAH	TAL SL

Lab Chronicle

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

Job ID: 500-217777-2

Client Sample ID: MW-05

Date Collected: 06/07/22 10:18

Date Received: 06/08/22 17:43

Lab Sample ID: 500-217777-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			570311	06/16/22 14:09	MS	TAL SL
Total/NA	Analysis	903.0		1	573267	07/08/22 13:57	EMH	TAL SL
Total/NA	Prep	PrecSep_0			570316	06/16/22 14:40	MS	TAL SL
Total/NA	Analysis	904.0		1	571384	06/23/22 12:08	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	573390	07/11/22 10:32	CAH	TAL SL

Client Sample ID: MW-10

Date Collected: 06/07/22 15:30

Date Received: 06/08/22 17:43

Lab Sample ID: 500-217777-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			570311	06/16/22 14:09	MS	TAL SL
Total/NA	Analysis	903.0		1	573267	07/08/22 13:57	EMH	TAL SL
Total/NA	Prep	PrecSep_0			570316	06/16/22 14:40	MS	TAL SL
Total/NA	Analysis	904.0		1	571384	06/23/22 12:08	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	573390	07/11/22 10:32	CAH	TAL SL

Client Sample ID: Duplicate

Date Collected: 06/07/22 00:00

Date Received: 06/08/22 17:43

Lab Sample ID: 500-217777-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			570311	06/16/22 14:09	MS	TAL SL
Total/NA	Analysis	903.0		1	573267	07/08/22 13:57	EMH	TAL SL
Total/NA	Prep	PrecSep_0			570316	06/16/22 14:40	MS	TAL SL
Total/NA	Analysis	904.0		1	571384	06/23/22 12:08	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	573390	07/11/22 10:32	CAH	TAL SL

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 500-217777-2

Laboratory: Eurofins St. Louis

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

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

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Tracer/Carrier Summary

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

Job ID: 500-217777-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (40-110)
500-217777-1	MW-01	94.3
500-217777-1 DU	MW-01	91.0
500-217777-2	MW-02	87.5
500-217777-3	MW-03	83.0
500-217777-4	MW-04	89.3
500-217777-5	MW-05	92.8
500-217777-6	MW-10	77.5
500-217777-7	Duplicate	54.0
LCS 160-570311/2-A	Lab Control Sample	101
MB 160-570311/1-A	Method Blank	93.3

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (40-110)	Y (40-110)
500-217777-1	MW-01	94.3	86.4
500-217777-1 DU	MW-01	91.0	85.2
500-217777-2	MW-02	87.5	85.2
500-217777-3	MW-03	83.0	86.7
500-217777-4	MW-04	89.3	86.4
500-217777-5	MW-05	92.8	84.1
500-217777-6	MW-10	77.5	86.7
500-217777-7	Duplicate	54.0	86.0
LCS 160-570316/2-A	Lab Control Sample	101	85.6
MB 160-570316/1-A	Method Blank	93.3	86.4

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

ANALYTICAL REPORT

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

Laboratory Job ID: 500-221573-1
Client Project/Site: Powerton CCR FAB

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

Attn: Richard Gnat



Authorized for release by:
9/29/2022 9:30:19 AM

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

Diana.Mockler@et.eurofinsus.com

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

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



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Case Narrative

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

Job ID: 500-221573-1

Job ID: 500-221573-1

Laboratory: Eurofins Chicago

Narrative

**Job Narrative
500-221573-1**

Comments

No additional comments.

Receipt

The samples were received on 8/31/2022 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.0° C and 4.5° C.

Metals

Method 6020A: The continuing calibration verification (CCV) associated with batch 500-673884 recovered above the upper control limit for Beryllium and Lithium. The low level continuing calibration verification (CCVL) at line 33, associated with batch 500-673884 recovered above the upper control limit for Beryllium. The samples associated with this CCV/CCVL 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

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: 500-221573-1

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: 500-221573-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-221573-1	MW-01	Water	08/30/22 09:32	08/31/22 09:30
500-221573-2	MW-02	Water	08/30/22 10:48	08/31/22 09:30
500-221573-3	MW-03	Water	08/30/22 11:34	08/31/22 09:30
500-221573-4	MW-04	Water	08/30/22 12:37	08/31/22 09:30
500-221573-5	MW-05	Water	08/30/22 13:25	08/31/22 09:30
500-221573-6	MW-10	Water	08/30/22 08:42	08/31/22 09:30
500-221573-7	Duplicate	Water	08/30/22 00:00	08/31/22 09:30

- 1
- 2
- 3
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- 10
- 11
- 12
- 13

Client Sample Results

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

Job ID: 500-221573-1

Client Sample ID: MW-01

Lab Sample ID: 500-221573-1

Date Collected: 08/30/22 09:32

Matrix: Water

Date Received: 08/31/22 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		09/01/22 08:19	09/01/22 21:50	1
Arsenic	<0.0010		0.0010		mg/L		09/01/22 08:19	09/01/22 21:50	1
Barium	0.073		0.0025		mg/L		09/01/22 08:19	09/01/22 21:50	1
Beryllium	<0.0010	^+	0.0010		mg/L		09/01/22 08:19	09/08/22 20:09	1
Boron	0.59		0.050		mg/L		09/01/22 08:19	09/08/22 20:09	1
Cadmium	<0.00050		0.00050		mg/L		09/01/22 08:19	09/01/22 21:50	1
Calcium	92		0.20		mg/L		09/01/22 08:19	09/01/22 21:50	1
Chromium	<0.0050		0.0050		mg/L		09/01/22 08:19	09/01/22 21:50	1
Cobalt	<0.0010		0.0010		mg/L		09/01/22 08:19	09/01/22 21:50	1
Lead	<0.00050		0.00050		mg/L		09/01/22 08:19	09/01/22 21:50	1
Lithium	<0.010	^+	0.010		mg/L		09/01/22 08:19	09/08/22 20:09	1
Molybdenum	<0.0050		0.0050		mg/L		09/01/22 08:19	09/01/22 21:50	1
Selenium	<0.0025		0.0025		mg/L		09/01/22 08:19	09/01/22 21:50	1
Thallium	<0.0020		0.0020		mg/L		09/01/22 08:19	09/08/22 20:09	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/08/22 10:05	09/09/22 08:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	810		10		mg/L			09/06/22 17:26	1
Chloride	44		4.0		mg/L			09/01/22 12:41	2
Fluoride	0.15		0.10		mg/L			09/10/22 14:33	1
Sulfate	66		10		mg/L			09/01/22 14:45	2

Client Sample Results

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

Job ID: 500-221573-1

Client Sample ID: MW-02
Date Collected: 08/30/22 10:48
Date Received: 08/31/22 09:30

Lab Sample ID: 500-221573-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		09/01/22 08:19	09/01/22 21:53	1
Arsenic	<0.0010		0.0010		mg/L		09/01/22 08:19	09/01/22 21:53	1
Barium	0.073		0.0025		mg/L		09/01/22 08:19	09/01/22 21:53	1
Beryllium	<0.0010	^+	0.0010		mg/L		09/01/22 08:19	09/08/22 20:12	1
Boron	1.1		0.050		mg/L		09/01/22 08:19	09/08/22 20:12	1
Cadmium	<0.00050		0.00050		mg/L		09/01/22 08:19	09/01/22 21:53	1
Calcium	95		0.20		mg/L		09/01/22 08:19	09/01/22 21:53	1
Chromium	<0.0050		0.0050		mg/L		09/01/22 08:19	09/01/22 21:53	1
Cobalt	<0.0010		0.0010		mg/L		09/01/22 08:19	09/01/22 21:53	1
Lead	<0.00050		0.00050		mg/L		09/01/22 08:19	09/01/22 21:53	1
Lithium	<0.010	^+	0.010		mg/L		09/01/22 08:19	09/08/22 20:12	1
Molybdenum	<0.0050		0.0050		mg/L		09/01/22 08:19	09/01/22 21:53	1
Selenium	<0.0025		0.0025		mg/L		09/01/22 08:19	09/01/22 21:53	1
Thallium	<0.0020		0.0020		mg/L		09/01/22 08:19	09/08/22 20:12	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/08/22 10:05	09/09/22 08:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	690		10		mg/L			09/06/22 17:29	1
Chloride	45		4.0		mg/L			09/01/22 12:42	2
Fluoride	0.15		0.10		mg/L			09/10/22 14:40	1
Sulfate	75		10		mg/L			09/01/22 14:46	2

Client Sample Results

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

Job ID: 500-221573-1

Client Sample ID: MW-03
Date Collected: 08/30/22 11:34
Date Received: 08/31/22 09:30

Lab Sample ID: 500-221573-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		09/01/22 08:19	09/01/22 21:57	1
Arsenic	<0.0010		0.0010		mg/L		09/01/22 08:19	09/01/22 21:57	1
Barium	0.10		0.0025		mg/L		09/01/22 08:19	09/01/22 21:57	1
Beryllium	<0.0010	^+	0.0010		mg/L		09/01/22 08:19	09/08/22 20:16	1
Boron	0.57		0.050		mg/L		09/01/22 08:19	09/08/22 20:16	1
Cadmium	<0.00050		0.00050		mg/L		09/01/22 08:19	09/01/22 21:57	1
Calcium	87		0.20		mg/L		09/01/22 08:19	09/01/22 21:57	1
Chromium	<0.0050		0.0050		mg/L		09/01/22 08:19	09/01/22 21:57	1
Cobalt	<0.0010		0.0010		mg/L		09/01/22 08:19	09/01/22 21:57	1
Lead	<0.00050		0.00050		mg/L		09/01/22 08:19	09/01/22 21:57	1
Lithium	<0.010	^+	0.010		mg/L		09/01/22 08:19	09/08/22 20:16	1
Molybdenum	<0.0050		0.0050		mg/L		09/01/22 08:19	09/01/22 21:57	1
Selenium	<0.0025		0.0025		mg/L		09/01/22 08:19	09/01/22 21:57	1
Thallium	<0.0020		0.0020		mg/L		09/01/22 08:19	09/08/22 20:16	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/08/22 10:05	09/09/22 08:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	710		10		mg/L			09/06/22 17:30	1
Chloride	50		4.0		mg/L			09/01/22 12:44	2
Fluoride	0.21		0.10		mg/L			09/10/22 14:49	1
Sulfate	51		10		mg/L			09/01/22 15:34	2

Client Sample Results

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

Job ID: 500-221573-1

Client Sample ID: MW-04

Lab Sample ID: 500-221573-4

Date Collected: 08/30/22 12:37

Matrix: Water

Date Received: 08/31/22 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		09/01/22 08:19	09/01/22 22:00	1
Arsenic	<0.0010		0.0010		mg/L		09/01/22 08:19	09/01/22 22:00	1
Barium	0.034		0.0025		mg/L		09/01/22 08:19	09/01/22 22:00	1
Beryllium	<0.0010	^+	0.0010		mg/L		09/01/22 08:19	09/08/22 20:19	1
Boron	0.67		0.050		mg/L		09/01/22 08:19	09/08/22 20:19	1
Cadmium	<0.00050		0.00050		mg/L		09/01/22 08:19	09/01/22 22:00	1
Calcium	94		0.20		mg/L		09/01/22 08:19	09/01/22 22:00	1
Chromium	<0.0050		0.0050		mg/L		09/01/22 08:19	09/01/22 22:00	1
Cobalt	<0.0010		0.0010		mg/L		09/01/22 08:19	09/01/22 22:00	1
Lead	<0.00050		0.00050		mg/L		09/01/22 08:19	09/01/22 22:00	1
Lithium	<0.010	^+	0.010		mg/L		09/01/22 08:19	09/08/22 20:19	1
Molybdenum	<0.0050		0.0050		mg/L		09/01/22 08:19	09/01/22 22:00	1
Selenium	<0.0025		0.0025		mg/L		09/01/22 08:19	09/01/22 22:00	1
Thallium	<0.0020		0.0020		mg/L		09/01/22 08:19	09/08/22 20:19	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/08/22 10:05	09/09/22 08:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	720		10		mg/L			09/06/22 17:31	1
Chloride	61		4.0		mg/L			09/01/22 12:45	2
Fluoride	0.21		0.10		mg/L			09/10/22 14:52	1
Sulfate	67		10		mg/L			09/01/22 15:35	2

Client Sample Results

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

Job ID: 500-221573-1

Client Sample ID: MW-05

Lab Sample ID: 500-221573-5

Date Collected: 08/30/22 13:25

Matrix: Water

Date Received: 08/31/22 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		09/01/22 08:19	09/01/22 22:04	1
Arsenic	<0.0010		0.0010		mg/L		09/01/22 08:19	09/01/22 22:04	1
Barium	0.029		0.0025		mg/L		09/01/22 08:19	09/01/22 22:04	1
Beryllium	<0.0010	^+	0.0010		mg/L		09/01/22 08:19	09/08/22 20:23	1
Boron	0.69		0.050		mg/L		09/01/22 08:19	09/08/22 20:23	1
Cadmium	<0.00050		0.00050		mg/L		09/01/22 08:19	09/01/22 22:04	1
Calcium	79		0.20		mg/L		09/01/22 08:19	09/01/22 22:04	1
Chromium	<0.0050		0.0050		mg/L		09/01/22 08:19	09/01/22 22:04	1
Cobalt	<0.0010		0.0010		mg/L		09/01/22 08:19	09/01/22 22:04	1
Lead	<0.00050		0.00050		mg/L		09/01/22 08:19	09/01/22 22:04	1
Lithium	<0.010	^+	0.010		mg/L		09/01/22 08:19	09/08/22 20:23	1
Molybdenum	0.0073		0.0050		mg/L		09/01/22 08:19	09/01/22 22:04	1
Selenium	<0.0025		0.0025		mg/L		09/01/22 08:19	09/01/22 22:04	1
Thallium	<0.0020		0.0020		mg/L		09/01/22 08:19	09/08/22 20:23	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/08/22 10:05	09/09/22 08:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	720		10		mg/L			09/06/22 17:32	1
Chloride	73		4.0		mg/L			09/01/22 12:45	2
Fluoride	0.38		0.10		mg/L			09/10/22 14:54	1
Sulfate	86		25		mg/L			09/01/22 15:36	5

Client Sample Results

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

Job ID: 500-221573-1

Client Sample ID: MW-10

Lab Sample ID: 500-221573-6

Date Collected: 08/30/22 08:42

Matrix: Water

Date Received: 08/31/22 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		09/01/22 08:19	09/01/22 22:07	1
Arsenic	0.0012		0.0010		mg/L		09/01/22 08:19	09/01/22 22:07	1
Barium	0.24		0.0025		mg/L		09/01/22 08:19	09/01/22 22:07	1
Beryllium	<0.0010	^+	0.0010		mg/L		09/01/22 08:19	09/08/22 20:26	1
Boron	0.38		0.050		mg/L		09/01/22 08:19	09/08/22 20:26	1
Cadmium	<0.00050		0.00050		mg/L		09/01/22 08:19	09/01/22 22:07	1
Calcium	92		0.20		mg/L		09/01/22 08:19	09/01/22 22:07	1
Chromium	<0.0050		0.0050		mg/L		09/01/22 08:19	09/01/22 22:07	1
Cobalt	0.0086		0.0010		mg/L		09/01/22 08:19	09/01/22 22:07	1
Lead	0.00074		0.00050		mg/L		09/01/22 08:19	09/01/22 22:07	1
Lithium	<0.010	^+	0.010		mg/L		09/01/22 08:19	09/08/22 20:26	1
Molybdenum	<0.0050		0.0050		mg/L		09/01/22 08:19	09/01/22 22:07	1
Selenium	<0.0025		0.0025		mg/L		09/01/22 08:19	09/01/22 22:07	1
Thallium	<0.0020		0.0020		mg/L		09/01/22 08:19	09/08/22 20:26	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/08/22 10:05	09/09/22 08:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	590		10		mg/L			09/06/22 18:03	1
Chloride	45		4.0		mg/L			09/01/22 12:45	2
Fluoride	0.22		0.10		mg/L			09/10/22 14:56	1
Sulfate	38		10		mg/L			09/01/22 15:36	2

Client Sample Results

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

Job ID: 500-221573-1

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

Lab Sample ID: 500-221573-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		09/01/22 08:19	09/01/22 22:11	1
Arsenic	<0.0010		0.0010		mg/L		09/01/22 08:19	09/01/22 22:11	1
Barium	0.10		0.0025		mg/L		09/01/22 08:19	09/01/22 22:11	1
Beryllium	<0.0010	^+	0.0010		mg/L		09/01/22 08:19	09/08/22 20:30	1
Boron	0.58		0.050		mg/L		09/01/22 08:19	09/08/22 20:30	1
Cadmium	<0.00050		0.00050		mg/L		09/01/22 08:19	09/01/22 22:11	1
Calcium	88		0.20		mg/L		09/01/22 08:19	09/01/22 22:11	1
Chromium	<0.0050		0.0050		mg/L		09/01/22 08:19	09/01/22 22:11	1
Cobalt	<0.0010		0.0010		mg/L		09/01/22 08:19	09/01/22 22:11	1
Lead	<0.00050		0.00050		mg/L		09/01/22 08:19	09/01/22 22:11	1
Lithium	<0.010	^+	0.010		mg/L		09/01/22 08:19	09/08/22 20:30	1
Molybdenum	<0.0050		0.0050		mg/L		09/01/22 08:19	09/01/22 22:11	1
Selenium	<0.0025		0.0025		mg/L		09/01/22 08:19	09/01/22 22:11	1
Thallium	<0.0020		0.0020		mg/L		09/01/22 08:19	09/08/22 20:30	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/08/22 10:05	09/09/22 08:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	670		10		mg/L			09/06/22 17:33	1
Chloride	48		10		mg/L			09/01/22 14:01	5
Fluoride	0.22		0.10		mg/L			09/10/22 14:59	1
Sulfate	46		25		mg/L			09/01/22 15:36	5

Definitions/Glossary

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

Job ID: 500-221573-1

Qualifiers

Metals

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

General Chemistry

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit

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: 500-221573-1

Metals

Prep Batch: 672695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221573-1	MW-01	Total Recoverable	Water	3005A	
500-221573-2	MW-02	Total Recoverable	Water	3005A	
500-221573-3	MW-03	Total Recoverable	Water	3005A	
500-221573-4	MW-04	Total Recoverable	Water	3005A	
500-221573-5	MW-05	Total Recoverable	Water	3005A	
500-221573-6	MW-10	Total Recoverable	Water	3005A	
500-221573-7	Duplicate	Total Recoverable	Water	3005A	
MB 500-672695/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-672695/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 673460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221573-1	MW-01	Total Recoverable	Water	6020A	672695
500-221573-2	MW-02	Total Recoverable	Water	6020A	672695
500-221573-3	MW-03	Total Recoverable	Water	6020A	672695
500-221573-4	MW-04	Total Recoverable	Water	6020A	672695
500-221573-5	MW-05	Total Recoverable	Water	6020A	672695
500-221573-6	MW-10	Total Recoverable	Water	6020A	672695
500-221573-7	Duplicate	Total Recoverable	Water	6020A	672695
MB 500-672695/1-A	Method Blank	Total Recoverable	Water	6020A	672695
LCS 500-672695/2-A	Lab Control Sample	Total Recoverable	Water	6020A	672695

Prep Batch: 673622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221573-1	MW-01	Total/NA	Water	7470A	
500-221573-2	MW-02	Total/NA	Water	7470A	
500-221573-3	MW-03	Total/NA	Water	7470A	
500-221573-4	MW-04	Total/NA	Water	7470A	
500-221573-5	MW-05	Total/NA	Water	7470A	
500-221573-6	MW-10	Total/NA	Water	7470A	
500-221573-7	Duplicate	Total/NA	Water	7470A	
MB 500-673622/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-673622/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-221573-6 MS	MW-10	Total/NA	Water	7470A	
500-221573-6 MSD	MW-10	Total/NA	Water	7470A	
500-221573-6 DU	MW-10	Total/NA	Water	7470A	

Analysis Batch: 673884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221573-1	MW-01	Total Recoverable	Water	6020A	672695
500-221573-2	MW-02	Total Recoverable	Water	6020A	672695
500-221573-3	MW-03	Total Recoverable	Water	6020A	672695
500-221573-4	MW-04	Total Recoverable	Water	6020A	672695
500-221573-5	MW-05	Total Recoverable	Water	6020A	672695
500-221573-6	MW-10	Total Recoverable	Water	6020A	672695
500-221573-7	Duplicate	Total Recoverable	Water	6020A	672695
MB 500-672695/1-A	Method Blank	Total Recoverable	Water	6020A	672695
LCS 500-672695/2-A	Lab Control Sample	Total Recoverable	Water	6020A	672695

QC Association Summary

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

Job ID: 500-221573-1

Metals

Analysis Batch: 673899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221573-1	MW-01	Total/NA	Water	7470A	673622
500-221573-2	MW-02	Total/NA	Water	7470A	673622
500-221573-3	MW-03	Total/NA	Water	7470A	673622
500-221573-4	MW-04	Total/NA	Water	7470A	673622
500-221573-5	MW-05	Total/NA	Water	7470A	673622
500-221573-6	MW-10	Total/NA	Water	7470A	673622
500-221573-7	Duplicate	Total/NA	Water	7470A	673622
MB 500-673622/12-A	Method Blank	Total/NA	Water	7470A	673622
LCS 500-673622/13-A	Lab Control Sample	Total/NA	Water	7470A	673622
500-221573-6 MS	MW-10	Total/NA	Water	7470A	673622
500-221573-6 MSD	MW-10	Total/NA	Water	7470A	673622
500-221573-6 DU	MW-10	Total/NA	Water	7470A	673622

General Chemistry

Analysis Batch: 672805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221573-1	MW-01	Total/NA	Water	SM 4500 Cl- E	
500-221573-2	MW-02	Total/NA	Water	SM 4500 Cl- E	
500-221573-3	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-221573-4	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-221573-5	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-221573-6	MW-10	Total/NA	Water	SM 4500 Cl- E	
500-221573-7	Duplicate	Total/NA	Water	SM 4500 Cl- E	
MB 500-672805/58	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 500-672805/94	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-672805/59	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 500-672805/95	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 672849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221573-1	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-221573-2	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-221573-3	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-221573-4	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-221573-5	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-221573-6	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-221573-7	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-672849/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
MB 500-672849/72	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-672849/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
LCS 500-672849/73	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-221573-3 MS	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-221573-3 MSD	MW-03	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 673324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221573-1	MW-01	Total/NA	Water	SM 2540C	
500-221573-2	MW-02	Total/NA	Water	SM 2540C	
500-221573-3	MW-03	Total/NA	Water	SM 2540C	
500-221573-4	MW-04	Total/NA	Water	SM 2540C	

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QC Association Summary

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

Job ID: 500-221573-1

General Chemistry (Continued)

Analysis Batch: 673324 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221573-5	MW-05	Total/NA	Water	SM 2540C	
500-221573-7	Duplicate	Total/NA	Water	SM 2540C	
MB 500-673324/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-673324/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-221573-1 DU	MW-01	Total/NA	Water	SM 2540C	

Analysis Batch: 673325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221573-6	MW-10	Total/NA	Water	SM 2540C	
MB 500-673325/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-673325/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 674042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221573-1	MW-01	Total/NA	Water	SM 4500 F C	
500-221573-2	MW-02	Total/NA	Water	SM 4500 F C	
500-221573-3	MW-03	Total/NA	Water	SM 4500 F C	
500-221573-4	MW-04	Total/NA	Water	SM 4500 F C	
500-221573-5	MW-05	Total/NA	Water	SM 4500 F C	
500-221573-6	MW-10	Total/NA	Water	SM 4500 F C	
500-221573-7	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-674042/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-674042/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-221573-1 MS	MW-01	Total/NA	Water	SM 4500 F C	
500-221573-1 MSD	MW-01	Total/NA	Water	SM 4500 F C	

QC Sample Results

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

Job ID: 500-221573-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-672695/1-A
Matrix: Water
Analysis Batch: 673460

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 672695

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		09/01/22 08:19	09/01/22 20:38	1
Arsenic	<0.0010		0.0010		mg/L		09/01/22 08:19	09/01/22 20:38	1
Barium	<0.0025		0.0025		mg/L		09/01/22 08:19	09/01/22 20:38	1
Cadmium	<0.00050		0.00050		mg/L		09/01/22 08:19	09/01/22 20:38	1
Calcium	<0.20		0.20		mg/L		09/01/22 08:19	09/01/22 20:38	1
Chromium	<0.0050		0.0050		mg/L		09/01/22 08:19	09/01/22 20:38	1
Cobalt	<0.0010		0.0010		mg/L		09/01/22 08:19	09/01/22 20:38	1
Lead	<0.00050		0.00050		mg/L		09/01/22 08:19	09/01/22 20:38	1
Molybdenum	<0.0050		0.0050		mg/L		09/01/22 08:19	09/01/22 20:38	1
Selenium	<0.0025		0.0025		mg/L		09/01/22 08:19	09/01/22 20:38	1

Lab Sample ID: MB 500-672695/1-A
Matrix: Water
Analysis Batch: 673884

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 672695

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0010	^+	0.0010		mg/L		09/01/22 08:19	09/08/22 20:02	1
Boron	<0.050		0.050		mg/L		09/01/22 08:19	09/08/22 20:02	1
Lithium	<0.010	^+	0.010		mg/L		09/01/22 08:19	09/08/22 20:02	1
Thallium	<0.0020		0.0020		mg/L		09/01/22 08:19	09/08/22 20:02	1

Lab Sample ID: LCS 500-672695/2-A
Matrix: Water
Analysis Batch: 673460

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672695

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.500	0.465		mg/L		93	80 - 120
Arsenic	0.100	0.0916		mg/L		92	80 - 120
Barium	0.500	0.450		mg/L		90	80 - 120
Cadmium	0.0500	0.0483		mg/L		97	80 - 120
Calcium	10.0	8.61		mg/L		86	80 - 120
Chromium	0.200	0.183		mg/L		92	80 - 120
Cobalt	0.500	0.453		mg/L		91	80 - 120
Lead	0.100	0.0980		mg/L		98	80 - 120
Molybdenum	1.00	0.885		mg/L		88	80 - 120
Selenium	0.100	0.0941		mg/L		94	80 - 120

Lab Sample ID: LCS 500-672695/2-A
Matrix: Water
Analysis Batch: 673884

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672695

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	0.0500	0.0532	^+	mg/L		106	80 - 120
Boron	1.00	1.03		mg/L		103	80 - 120
Lithium	0.100	0.111	^+	mg/L		111	80 - 120
Thallium	0.100	0.103		mg/L		103	80 - 120

QC Sample Results

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

Job ID: 500-221573-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-673622/12-A
Matrix: Water
Analysis Batch: 673899

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 673622

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/08/22 10:05	09/09/22 08:17	1

Lab Sample ID: LCS 500-673622/13-A
Matrix: Water
Analysis Batch: 673899

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 673622

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00200	0.00181		mg/L		91	80 - 120

Lab Sample ID: 500-221573-6 MS
Matrix: Water
Analysis Batch: 673899

Client Sample ID: MW-10
Prep Type: Total/NA
Prep Batch: 673622

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.00020		0.00100	0.00111		mg/L		111	75 - 125

Lab Sample ID: 500-221573-6 MSD
Matrix: Water
Analysis Batch: 673899

Client Sample ID: MW-10
Prep Type: Total/NA
Prep Batch: 673622

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.00020		0.00100	0.00112		mg/L		112	75 - 125	1	20

Lab Sample ID: 500-221573-6 DU
Matrix: Water
Analysis Batch: 673899

Client Sample ID: MW-10
Prep Type: Total/NA
Prep Batch: 673622

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

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

Lab Sample ID: MB 500-673324/1
Matrix: Water
Analysis Batch: 673324

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			09/06/22 17:10	1

Lab Sample ID: LCS 500-673324/2
Matrix: Water
Analysis Batch: 673324

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	296		mg/L		118	80 - 120

QC Sample Results

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

Job ID: 500-221573-1

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

Lab Sample ID: 500-221573-1 DU
Matrix: Water
Analysis Batch: 673324

Client Sample ID: MW-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	810		740	F3	mg/L		9	5

Lab Sample ID: MB 500-673325/1
Matrix: Water
Analysis Batch: 673325

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			09/06/22 17:40	1

Lab Sample ID: LCS 500-673325/2
Matrix: Water
Analysis Batch: 673325

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	290		mg/L		116	80 - 120

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-672805/58
Matrix: Water
Analysis Batch: 672805

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			09/01/22 12:38	1

Lab Sample ID: MB 500-672805/94
Matrix: Water
Analysis Batch: 672805

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			09/01/22 14:00	1

Lab Sample ID: LCS 500-672805/59
Matrix: Water
Analysis Batch: 672805

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	20.7		mg/L		104	85 - 115

Lab Sample ID: LCS 500-672805/95
Matrix: Water
Analysis Batch: 672805

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

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

QC Sample Results

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

Job ID: 500-221573-1

Method: SM 4500 F C - Fluoride

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

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			09/10/22 14:28	1

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

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	10.8		mg/L		108	90 - 119

Lab Sample ID: 500-221573-1 MS
Matrix: Water
Analysis Batch: 674042

Client Sample ID: MW-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.15		5.00	5.49		mg/L		107	75 - 125

Lab Sample ID: 500-221573-1 MSD
Matrix: Water
Analysis Batch: 674042

Client Sample ID: MW-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.15		5.00	5.43		mg/L		106	75 - 125	1	20

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-672849/16
Matrix: Water
Analysis Batch: 672849

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			09/01/22 14:37	1

Lab Sample ID: MB 500-672849/72
Matrix: Water
Analysis Batch: 672849

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			09/01/22 15:33	1

Lab Sample ID: LCS 500-672849/17
Matrix: Water
Analysis Batch: 672849

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	20.0	21.4		mg/L		107	88 - 123

QC Sample Results

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

Job ID: 500-221573-1

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

Lab Sample ID: LCS 500-672849/73
Matrix: Water
Analysis Batch: 672849

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	20.0	21.5		mg/L		108	88 - 123

Lab Sample ID: 500-221573-3 MS
Matrix: Water
Analysis Batch: 672849

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	51		20.0	67.9		mg/L		87	75 - 125

Lab Sample ID: 500-221573-3 MSD
Matrix: Water
Analysis Batch: 672849

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	51		20.0	68.5		mg/L		90	75 - 125	1	20

Eurofins Chicago

241 Board Street
University Park IL 60484
Phone 708-634 5200 Fax 708 534 5211

Chain of Custody Record

MKE 232 eurofins

Client Information		Sample # Kaelyn Sperle		Lab # Mockler-Diana J		Carrier # act 10 No(s)		COC No 500-104268-44025 1				
Client Contact Mitchel Dolan		Phone 262-278-1621		E Mail Diana.Mockler@et.eurofinsus.com		State of Origin IL		Page Page 1 of 1				
Company KPRG and Associates Inc.				Analysis Requested								
Address 14665 West L. Sabor Road Suite 1A				Due Date Requested Standard		Job # 500-22/573						
City Brookfield				TAT Requested (days) Standard		Preservation Codes						
State Zip WI 53005				Compliance Project <input type="checkbox"/> Yes <input type="checkbox"/> No		A HCL M Hexane B NaOH N Nitrite C Z Acetate O As/Na ² D Nitric Acid P Na ₂ O ₄ E NaHSO ₄ R Na ₂ S ₂ O ₃ F MeOH S H ₂ SO ₄ G Amchi T TSP Dodecylaldehyde H Ascorbic Acid U Aceton I Ice V MCAA J Dist Water W pH 4.5 K EDTA Y T ₁ ama L EDA Z other specified						
Phone 262 781-0475(Tel)				PO # 4502081030		Field Filtered Sample (Yes or No) <input type="checkbox"/> Perform MS/MSD (Yes or No) <input type="checkbox"/> 903.0 Standard Target List Ra226Ra228_GFFC Local Method 904.0 Standard Target List 6020A, 7470A 2540C, 4500_F, C, SIM4500, Cl, E, SIM4500_S04_E						
Email mtcheld@kprginc.com				Project # 50011617								
Project Name Powerton CCR FAB				SSOW#								
State Illinois								Other				
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp G=grab)	Matrix (W=water W=sewage O=waste/oil BT Tit Use As Air)	Preservation Code				Special Instructions/Note		
1	MW-01	8/30/22	0932	G	Water	N	N	X	X	X	X	
2	MW-02	8/30/22	1048	G	Water	N	N	X	X	X	X	
3	MW-03	8/30/22	1134	G	Water	N	N	X	X	X	X	
4	MW-04	8/30/22	1237	G	Water	N	N	X	X	X	X	
5	MW-05	8/30/22	1325	G	Water	N	N	X	X	X	X	
6	MW-10	8/30/22	0842	G	Water	N	N	X	X	X	X	
7	Duplicate	8/30/22		G	Water	N	N	X	X	X	X	
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)						
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radioactive						<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months						
Deliverable Requested <input type="checkbox"/> I <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV Other (specify)						Special Instructions/QC Requirements						
Empty Kit Returned by			Date			Time			Method of Shipment			
Requested by Kaelyn Sperle			Date/Time 8/30/22/1645			Company KPRG			Received by FedEx			
Requested by			Date/Time 8/30/22 0930			Company FedEx			Remarks 5.8 → 45.3... → 2.0			

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- 13

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

SHIP DATE: 30AUG22
ACTWGT: 50.85 LB
CAD: 6994780/SSFE2322
DIMS: 24x13x13 IN
BILL THIRD PARTY

Part # 156297-435 RRDB2 EXP 04/23

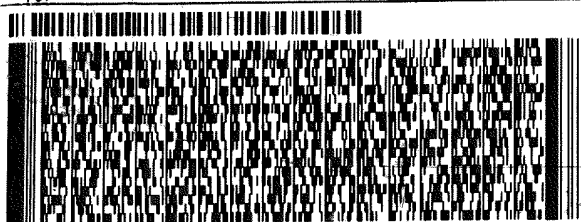
TO EUROFINS

2417 BOND ST.

UNIVERSITY PARK IL 60484

(555) 555-5555
IN: REF: PO: DEPT:

500-221573 Waybl



FedEx Express



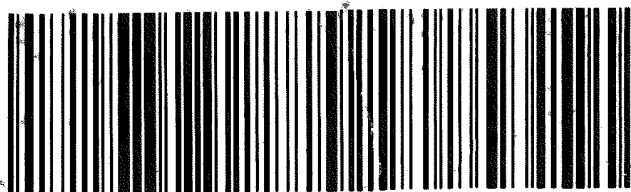
REL# 3786346

4 of 6
MPS# 2774 0693 6115
0263 Mstr# 2774 0693 6089

WED - 31 AUG 10:30A
PRIORITY OVERNIGHT

XN JOTA

AHS
60484
IL-US ORD



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

SHIP DATE: 30AUG22
ACTWGT: 50.85 LB
CAD: 6994780/SSFE2322
DIMS: 24x13x13 IN
BILL THIRD PARTY

Part # 156297-435 RRDB2 EXP 04/23

TO EUROFINS

2417 BOND ST.

UNIVERSITY PARK IL 60484

(555) 555-5555 REF: DEPT:



FedEx Exp



REL# 3786346

2 of 6
MPS# 2774 0693 60
0263 Mstr# 2774 0693 6089

WED - 31 AUG 10:30A
PRIORITY OVERNIGHT

XN JOTA

0201

AHS
60484
IL-US ORD



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-221573-1

Login Number: 221573

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	4.5,2.0
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: 500-221573-1

Client Sample ID: MW-01
Date Collected: 08/30/22 09:32
Date Received: 08/31/22 09:30

Lab Sample ID: 500-221573-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672695	BDE	EET CHI	09/01/22 08:19 - 09/01/22 08:49 ¹
Total Recoverable	Analysis	6020A		1	673884	FXG	EET CHI	09/08/22 20:09
Total Recoverable	Prep	3005A			672695	BDE	EET CHI	09/01/22 08:19 - 09/01/22 08:49 ¹
Total Recoverable	Analysis	6020A		1	673460	FXG	EET CHI	09/01/22 21:50
Total/NA	Prep	7470A			673622	MJG	EET CHI	09/08/22 10:05 - 09/08/22 12:05 ¹
Total/NA	Analysis	7470A		1	673899	MJG	EET CHI	09/09/22 08:29
Total/NA	Analysis	SM 2540C		1	673324	SMO	EET CHI	09/06/22 17:26
Total/NA	Analysis	SM 4500 CI- E		2	672805	LP	EET CHI	09/01/22 12:41
Total/NA	Analysis	SM 4500 F C		1	674042	EAT	EET CHI	09/10/22 14:33
Total/NA	Analysis	SM 4500 SO4 E		2	672849	LP	EET CHI	09/01/22 14:45

Client Sample ID: MW-02
Date Collected: 08/30/22 10:48
Date Received: 08/31/22 09:30

Lab Sample ID: 500-221573-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672695	BDE	EET CHI	09/01/22 08:19 - 09/01/22 08:49 ¹
Total Recoverable	Analysis	6020A		1	673884	FXG	EET CHI	09/08/22 20:12
Total Recoverable	Prep	3005A			672695	BDE	EET CHI	09/01/22 08:19 - 09/01/22 08:49 ¹
Total Recoverable	Analysis	6020A		1	673460	FXG	EET CHI	09/01/22 21:53
Total/NA	Prep	7470A			673622	MJG	EET CHI	09/08/22 10:05 - 09/08/22 12:05 ¹
Total/NA	Analysis	7470A		1	673899	MJG	EET CHI	09/09/22 08:31
Total/NA	Analysis	SM 2540C		1	673324	SMO	EET CHI	09/06/22 17:29
Total/NA	Analysis	SM 4500 CI- E		2	672805	LP	EET CHI	09/01/22 12:42
Total/NA	Analysis	SM 4500 F C		1	674042	EAT	EET CHI	09/10/22 14:40
Total/NA	Analysis	SM 4500 SO4 E		2	672849	LP	EET CHI	09/01/22 14:46

Client Sample ID: MW-03
Date Collected: 08/30/22 11:34
Date Received: 08/31/22 09:30

Lab Sample ID: 500-221573-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672695	BDE	EET CHI	09/01/22 08:19 - 09/01/22 08:49 ¹
Total Recoverable	Analysis	6020A		1	673884	FXG	EET CHI	09/08/22 20:16
Total Recoverable	Prep	3005A			672695	BDE	EET CHI	09/01/22 08:19 - 09/01/22 08:49 ¹
Total Recoverable	Analysis	6020A		1	673460	FXG	EET CHI	09/01/22 21:57
Total/NA	Prep	7470A			673622	MJG	EET CHI	09/08/22 10:05 - 09/08/22 12:05 ¹
Total/NA	Analysis	7470A		1	673899	MJG	EET CHI	09/09/22 08:34
Total/NA	Analysis	SM 2540C		1	673324	SMO	EET CHI	09/06/22 17:30
Total/NA	Analysis	SM 4500 CI- E		2	672805	LP	EET CHI	09/01/22 12:44
Total/NA	Analysis	SM 4500 F C		1	674042	EAT	EET CHI	09/10/22 14:49
Total/NA	Analysis	SM 4500 SO4 E		2	672849	LP	EET CHI	09/01/22 15:34

Lab Chronicle

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

Job ID: 500-221573-1

Client Sample ID: MW-04

Date Collected: 08/30/22 12:37

Date Received: 08/31/22 09:30

Lab Sample ID: 500-221573-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672695	BDE	EET CHI	09/01/22 08:19 - 09/01/22 08:49 ¹
Total Recoverable	Analysis	6020A		1	673884	FXG	EET CHI	09/08/22 20:19
Total Recoverable	Prep	3005A			672695	BDE	EET CHI	09/01/22 08:19 - 09/01/22 08:49 ¹
Total Recoverable	Analysis	6020A		1	673460	FXG	EET CHI	09/01/22 22:00
Total/NA	Prep	7470A			673622	MJG	EET CHI	09/08/22 10:05 - 09/08/22 12:05 ¹
Total/NA	Analysis	7470A		1	673899	MJG	EET CHI	09/09/22 08:36
Total/NA	Analysis	SM 2540C		1	673324	SMO	EET CHI	09/06/22 17:31
Total/NA	Analysis	SM 4500 CI- E		2	672805	LP	EET CHI	09/01/22 12:45
Total/NA	Analysis	SM 4500 F C		1	674042	EAT	EET CHI	09/10/22 14:52
Total/NA	Analysis	SM 4500 SO4 E		2	672849	LP	EET CHI	09/01/22 15:35

Client Sample ID: MW-05

Date Collected: 08/30/22 13:25

Date Received: 08/31/22 09:30

Lab Sample ID: 500-221573-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672695	BDE	EET CHI	09/01/22 08:19 - 09/01/22 08:49 ¹
Total Recoverable	Analysis	6020A		1	673884	FXG	EET CHI	09/08/22 20:23
Total Recoverable	Prep	3005A			672695	BDE	EET CHI	09/01/22 08:19 - 09/01/22 08:49 ¹
Total Recoverable	Analysis	6020A		1	673460	FXG	EET CHI	09/01/22 22:04
Total/NA	Prep	7470A			673622	MJG	EET CHI	09/08/22 10:05 - 09/08/22 12:05 ¹
Total/NA	Analysis	7470A		1	673899	MJG	EET CHI	09/09/22 08:38
Total/NA	Analysis	SM 2540C		1	673324	SMO	EET CHI	09/06/22 17:32
Total/NA	Analysis	SM 4500 CI- E		2	672805	LP	EET CHI	09/01/22 12:45
Total/NA	Analysis	SM 4500 F C		1	674042	EAT	EET CHI	09/10/22 14:54
Total/NA	Analysis	SM 4500 SO4 E		5	672849	LP	EET CHI	09/01/22 15:36

Client Sample ID: MW-10

Date Collected: 08/30/22 08:42

Date Received: 08/31/22 09:30

Lab Sample ID: 500-221573-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672695	BDE	EET CHI	09/01/22 08:19 - 09/01/22 08:49 ¹
Total Recoverable	Analysis	6020A		1	673884	FXG	EET CHI	09/08/22 20:26
Total Recoverable	Prep	3005A			672695	BDE	EET CHI	09/01/22 08:19 - 09/01/22 08:49 ¹
Total Recoverable	Analysis	6020A		1	673460	FXG	EET CHI	09/01/22 22:07
Total/NA	Prep	7470A			673622	MJG	EET CHI	09/08/22 10:05 - 09/08/22 12:05 ¹
Total/NA	Analysis	7470A		1	673899	MJG	EET CHI	09/09/22 08:40
Total/NA	Analysis	SM 2540C		1	673325	SMO	EET CHI	09/06/22 18:03
Total/NA	Analysis	SM 4500 CI- E		2	672805	LP	EET CHI	09/01/22 12:45
Total/NA	Analysis	SM 4500 F C		1	674042	EAT	EET CHI	09/10/22 14:56
Total/NA	Analysis	SM 4500 SO4 E		2	672849	LP	EET CHI	09/01/22 15:36

Eurofins Chicago

Lab Chronicle

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

Job ID: 500-221573-1

Client Sample ID: Duplicate

Lab Sample ID: 500-221573-7

Date Collected: 08/30/22 00:00

Matrix: Water

Date Received: 08/31/22 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672695	BDE	EET CHI	09/01/22 08:19 - 09/01/22 08:49 ¹
Total Recoverable	Analysis	6020A		1	673884	FXG	EET CHI	09/08/22 20:30
Total Recoverable	Prep	3005A			672695	BDE	EET CHI	09/01/22 08:19 - 09/01/22 08:49 ¹
Total Recoverable	Analysis	6020A		1	673460	FXG	EET CHI	09/01/22 22:11
Total/NA	Prep	7470A			673622	MJG	EET CHI	09/08/22 10:05 - 09/08/22 12:05 ¹
Total/NA	Analysis	7470A		1	673899	MJG	EET CHI	09/09/22 08:48
Total/NA	Analysis	SM 2540C		1	673324	SMO	EET CHI	09/06/22 17:33
Total/NA	Analysis	SM 4500 Cl- E		5	672805	LP	EET CHI	09/01/22 14:01
Total/NA	Analysis	SM 4500 F C		1	674042	EAT	EET CHI	09/10/22 14:59
Total/NA	Analysis	SM 4500 SO4 E		5	672849	LP	EET CHI	09/01/22 15:36

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

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 500-221573-1

Laboratory: Eurofins Chicago

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

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 500-221573-2
Client Project/Site: Powerton CCR FAB (RAD)

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

Attn: Richard Gnat



Authorized for release by:
10/5/2022 11:15:11 AM

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

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

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



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Case Narrative

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

Job ID: 500-221573-2

Job ID: 500-221573-2

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-221573-2

Comments

No additional comments.

Receipt

The samples were received on 8/31/2022 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.0° C and 4.5° C.

RAD

Methods 903.0, 9315: Radium-226 batch 581076

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

Duplicate (500-221573-7), (LCS 160-581076/2-A), (MB 160-581076/1-A), (500-221498-K-14-A) and (500-221498-L-14-D DU)

Methods 903.0, 9315: Radium-226 batch 581008

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

MW-01 (500-221573-1), MW-02 (500-221573-2), MW-03 (500-221573-3), MW-04 (500-221573-4), MW-05 (500-221573-5), MW-10 (500-221573-6), (LCS 160-581008/2-A), (MB 160-581008/1-A), (500-221556-F-1-A) and (500-221556-E-1-A DU)

Methods 904.0, 9320: Radium-228 batch 583206

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

Duplicate (500-221573-7), (LCS 160-583206/2-A), (MB 160-583206/1-A), (500-221498-J-14-A) and (500-221498-J-14-B DU)

Methods 904.0, 9320: Radium-228 batch 582886

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

MW-01 (500-221573-1), MW-02 (500-221573-2), MW-03 (500-221573-3), MW-04 (500-221573-4), MW-05 (500-221573-5), MW-10 (500-221573-6), (LCS 160-582886/2-A), (MB 160-582886/1-A), (500-221556-F-2-A) and (500-221556-E-2-A DU)

Method PrecSep_0:

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

Method Summary

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

Job ID: 500-221573-2

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: 500-221573-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-221573-1	MW-01	Water	08/30/22 09:32	08/31/22 09:30
500-221573-2	MW-02	Water	08/30/22 10:48	08/31/22 09:30
500-221573-3	MW-03	Water	08/30/22 11:34	08/31/22 09:30
500-221573-4	MW-04	Water	08/30/22 12:37	08/31/22 09:30
500-221573-5	MW-05	Water	08/30/22 13:25	08/31/22 09:30
500-221573-6	MW-10	Water	08/30/22 08:42	08/31/22 09:30
500-221573-7	Duplicate	Water	08/30/22 00:00	08/31/22 09:30

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Client Sample Results

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

Job ID: 500-221573-2

Client Sample ID: MW-01

Lab Sample ID: 500-221573-1

Date Collected: 08/30/22 09:32

Matrix: Water

Date Received: 08/31/22 09:30

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0557	U	0.0631	0.0633	1.00	0.102	pCi/L	09/06/22 15:03	09/28/22 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.8		40 - 110					09/06/22 15:03	09/28/22 17:06	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.278	U	0.276	0.277	1.00	0.441	pCi/L	09/20/22 15:24	09/30/22 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.9		40 - 110					09/20/22 15:24	09/30/22 12:09	1
Y Carrier	86.4		40 - 110					09/20/22 15:24	09/30/22 12:09	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.333	U	0.283	0.284	5.00	0.441	pCi/L		10/03/22 13:21	1

Client Sample Results

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

Job ID: 500-221573-2

Client Sample ID: MW-02

Lab Sample ID: 500-221573-2

Date Collected: 08/30/22 10:48

Matrix: Water

Date Received: 08/31/22 09:30

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0108	U	0.0424	0.0424	1.00	0.0850	pCi/L	09/06/22 15:03	09/28/22 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.0		40 - 110					09/06/22 15:03	09/28/22 17:06	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.524		0.320	0.324	1.00	0.465	pCi/L	09/20/22 15:24	09/30/22 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		40 - 110					09/20/22 15:24	09/30/22 12:09	1
Y Carrier	89.0		40 - 110					09/20/22 15:24	09/30/22 12:09	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.535		0.323	0.327	5.00	0.465	pCi/L		10/03/22 13:21	1

Client Sample Results

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

Job ID: 500-221573-2

Client Sample ID: MW-03

Lab Sample ID: 500-221573-3

Date Collected: 08/30/22 11:34

Matrix: Water

Date Received: 08/31/22 09:30

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0402	U	0.0533	0.0534	1.00	0.0892	pCi/L	09/06/22 15:03	09/28/22 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.3		40 - 110					09/06/22 15:03	09/28/22 17:06	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.549		0.333	0.337	1.00	0.480	pCi/L	09/20/22 15:24	09/30/22 12:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		40 - 110					09/20/22 15:24	09/30/22 12:10	1
Y Carrier	84.5		40 - 110					09/20/22 15:24	09/30/22 12:10	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.589		0.337	0.341	5.00	0.480	pCi/L		10/03/22 13:21	1

Client Sample Results

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

Job ID: 500-221573-2

Client Sample ID: MW-04

Lab Sample ID: 500-221573-4

Date Collected: 08/30/22 12:37

Matrix: Water

Date Received: 08/31/22 09:30

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0248	U	0.0476	0.0477	1.00	0.0865	pCi/L	09/06/22 15:03	09/28/22 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					09/06/22 15:03	09/28/22 17:06	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.239	U	0.326	0.327	1.00	0.546	pCi/L	09/20/22 15:24	09/30/22 12:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.6		40 - 110					09/20/22 15:24	09/30/22 12:10	1
Y Carrier	86.7		40 - 110					09/20/22 15:24	09/30/22 12:10	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.264	U	0.329	0.330	5.00	0.546	pCi/L		10/03/22 13:21	1

Client Sample Results

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

Job ID: 500-221573-2

Client Sample ID: MW-05

Lab Sample ID: 500-221573-5

Date Collected: 08/30/22 13:25

Matrix: Water

Date Received: 08/31/22 09:30

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0280	U	0.0611	0.0612	1.00	0.111	pCi/L	09/06/22 15:03	09/28/22 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.3		40 - 110					09/06/22 15:03	09/28/22 17:06	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.461	U	0.348	0.351	1.00	0.538	pCi/L	09/20/22 15:24	09/30/22 12:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.1		40 - 110					09/20/22 15:24	09/30/22 12:10	1
Y Carrier	87.5		40 - 110					09/20/22 15:24	09/30/22 12:10	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.489	U	0.353	0.356	5.00	0.538	pCi/L		10/03/22 13:21	1

Client Sample Results

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

Job ID: 500-221573-2

Client Sample ID: MW-10

Lab Sample ID: 500-221573-6

Date Collected: 08/30/22 08:42

Matrix: Water

Date Received: 08/31/22 09:30

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.512		0.130	0.138	1.00	0.0953	pCi/L	09/06/22 15:03	09/28/22 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		40 - 110					09/06/22 15:03	09/28/22 17:06	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.892		0.414	0.422	1.00	0.561	pCi/L	09/20/22 15:24	09/30/22 12:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					09/20/22 15:24	09/30/22 12:11	1
Y Carrier	80.7		40 - 110					09/20/22 15:24	09/30/22 12:11	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.40		0.434	0.444	5.00	0.561	pCi/L		10/03/22 13:21	1

Client Sample Results

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

Job ID: 500-221573-2

Client Sample ID: Duplicate

Lab Sample ID: 500-221573-7

Date Collected: 08/30/22 00:00

Matrix: Water

Date Received: 08/31/22 09:30

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0114	U	0.0448	0.0448	1.00	0.0899	pCi/L	09/07/22 12:48	09/29/22 08:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					09/07/22 12:48	09/29/22 08:04	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.315	U	0.309	0.310	1.00	0.495	pCi/L	09/22/22 15:49	09/29/22 12:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		40 - 110					09/22/22 15:49	09/29/22 12:10	1
Y Carrier	85.6		40 - 110					09/22/22 15:49	09/29/22 12:10	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.326	U	0.312	0.313	5.00	0.495	pCi/L		09/29/22 18:28	1

Definitions/Glossary

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

Job ID: 500-221573-2

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: 500-221573-2

Rad

Prep Batch: 581008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221573-1	MW-01	Total/NA	Water	PrecSep-21	
500-221573-2	MW-02	Total/NA	Water	PrecSep-21	
500-221573-3	MW-03	Total/NA	Water	PrecSep-21	
500-221573-4	MW-04	Total/NA	Water	PrecSep-21	
500-221573-5	MW-05	Total/NA	Water	PrecSep-21	
500-221573-6	MW-10	Total/NA	Water	PrecSep-21	
MB 160-581008/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-581008/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 581076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221573-7	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-581076/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-581076/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 582886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221573-1	MW-01	Total/NA	Water	PrecSep_0	
500-221573-2	MW-02	Total/NA	Water	PrecSep_0	
500-221573-3	MW-03	Total/NA	Water	PrecSep_0	
500-221573-4	MW-04	Total/NA	Water	PrecSep_0	
500-221573-5	MW-05	Total/NA	Water	PrecSep_0	
500-221573-6	MW-10	Total/NA	Water	PrecSep_0	
MB 160-582886/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-582886/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 583206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221573-7	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-583206/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-583206/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

QC Sample Results

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

Job ID: 500-221573-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-581008/1-A
Matrix: Water
Analysis Batch: 583796

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 581008

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.02655	U	0.0369	0.0370	1.00	0.0964	pCi/L	09/06/22 15:03	09/28/22 14:43	1
Carrier	MB		Limits							
Ba Carrier	%Yield	MB Qualifier	40 - 110							
	99.0									
		Prepared	Analyzed	Dil Fac						
		09/06/22 15:03	09/28/22 14:43	1						

Lab Sample ID: LCS 160-581008/2-A
Matrix: Water
Analysis Batch: 583796

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 581008

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits	
				Uncert. (2σ+/-)						
Radium-226	11.3	9.855		1.03	1.00	0.0904	pCi/L	87	75 - 125	
Carrier	LCS	LCS								
Ba Carrier	%Yield	Qualifier	Limits							
	98.0		40 - 110							

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

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

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.08112	U	0.0644	0.0648	1.00	0.0908	pCi/L	09/07/22 12:48	09/29/22 08:01	1
Carrier	MB		Limits							
Ba Carrier	%Yield	MB Qualifier	40 - 110							
	95.6									
		Prepared	Analyzed	Dil Fac						
		09/07/22 12:48	09/29/22 08:01	1						

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

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

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

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-582886/1-A
Matrix: Water
Analysis Batch: 584234

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 582886

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.4739	U	0.321	0.324	1.00	0.476	pCi/L	09/20/22 15:24	09/30/22 12:03	1

Eurofins Chicago

QC Sample Results

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

Job ID: 500-221573-2

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

Carrier	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Yield	Qualifier				
Ba Carrier	88.0		40 - 110	09/20/22 15:24	09/30/22 12:03	1
Y Carrier	86.4		40 - 110	09/20/22 15:24	09/30/22 12:03	1

Lab Sample ID: LCS 160-582886/2-A
Matrix: Water
Analysis Batch: 584234

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 582886

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

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	83.0		40 - 110
Y Carrier	86.4		40 - 110

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

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

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

Carrier	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Yield	Qualifier				
Ba Carrier	80.0		40 - 110	09/22/22 15:49	09/29/22 12:04	1
Y Carrier	83.4		40 - 110	09/22/22 15:49	09/29/22 12:04	1

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

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

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

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	94.8		40 - 110
Y Carrier	85.6		40 - 110

Eurofins Chicago

241 Board Street
University Park IL 60484
Phone 708-534 5200 Fax 708 534 5211

Chain of Custody Record

MKE 232 eurofins

Client Information		Sample # Kaelyn Sperle		Lab # Mockler Diana J		Carrier Contact No(s)		COC No 500-104268-44025 1	
Client Contact Mitchel Dolan		Phone 262-278-1621		E Mail Diana.Mockler@eurofins.com		State of Origin IL		Page Page 1 of 1	
Company KPRG and Associates Inc.				Analysis Requested		Job # 500-221573		Preservation Codes	
Address 14665 West Lsbor Road Suite 1A		Due Date Requested Standard		TAT Requested (days) Standard		Compliance Project <input type="checkbox"/> Yes <input type="checkbox"/> No		A HCL M Hexane B NaOH N Nitro C Z Acetate O AsNa2O2 D Nitric Acid P Na2O4S E NaHSO4 R Na2S2O3 F MeOH S H2SO4 G Amchi T TSP Dodecylaldehyde H Ascorbic Acid U Aceton I Ice V MCAA J Dist Water W pH 4.5 K EDTA Y Tama L EDA Z other spec.f	
City Brookfield		PO # 4502081030		Project # 50011610		Project Name Powertron CCR FAB		Other	
State zip WI 53005		WOW #		SSOW #		Site Illinois		Special Instructions/Note	
Phone 262 781-0475(Tel)		Field Filtered Sample (Yes or No)		Performs MS/MSD (Yes or No)		903.0 Standard Target List		Total Number of Containers	
Email mtcheld@kprginc.com		904.0 Standard Target List		6020A, 7470A		2540C, 4500_F_C, SIM4500, Cl, E, SIM4500, SO4_E			
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp G=grab)		Matrix (W=water W=oil O=waste/oil BT Tit Use As Air)	
1 MW-01		8/30/22		0932		G		Water	
2 MW-02		8/30/22		1048		G		Water	
3 MW-03		8/30/22		1134		G		Water	
4 MW-04		8/30/22		1237		G		Water	
5 MW-05		8/30/22		1325		G		Water	
6 MW-10		8/30/22		0842		G		Water	
7 Duplicate		8/30/22				G		Water	
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client		Disposal By Lab		Archive For Months	
<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"/> Radioactive									
Deliverable Requested I II III IV Other (specify)		Special Instructions/QC Requirements		Empty Kit Required by		Date		Time	
Requested by Kaelyn Sperle		Date/Time 8/30/22/1645		Company KPRG		Received by FedEx		Date/Time 8/30/22/1645	
Requested by		Date/Time		Company		Received by Shw Leath		Date/Time 8/31/22 0930	
Requested by		Date/Time		Company		Received by		Date/Time	
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Temperature (°C) at the Remarks 5.8 → 45.3 → 2.0					

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

SHIP DATE: 30AUG22
ACTWGT: 50.85 LB
CAD: 6994780/SSFE2322
DIMS: 24x13x13 IN
BILL THIRD PARTY

Part # 156297-435 RRDB2 EXP 04/23

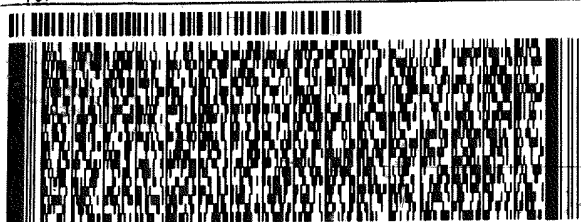
TO EUROFINS

2417 BOND ST.

UNIVERSITY PARK IL 60484

(555) 555-5555
IN: REF: PO: DEPT:

500-221573 Waybl



FedEx Express



REL# 3788346

4 of 6

MPS# 2774 0693 6115
0263

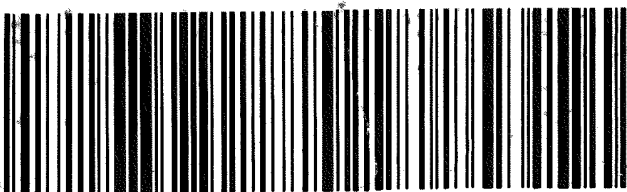
Mstr# 2774 0693 6089

0201

XN JOTA

WED - 31 AUG 10:30A
PRIORITY OVERNIGHT

AHS
60484
IL-US ORD



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

SHIP DATE: 30AUG22
ACTWGT: 50.85 LB
CAD: 6994780/SSFE2322
DIMS: 24x13x13 IN
BILL THIRD PARTY

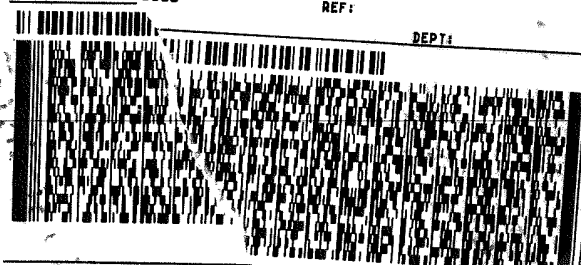
Part # 156297-435 RRDB2 EXP 04/23

TO EUROFINS

2417 BOND ST.

UNIVERSITY PARK IL 60484

(555) 555-5555
IN: REF: PO: DEPT:



FedEx Exp



REL# 3788346

2 of 6

MPS# 2774 0693 60
0263

Mstr# 2774 0693 6089 70

0201

XN JOTA

WED - 31 AUG 10:30A
PRIORITY OVERNIGHT

AHS
60484
IL-US ORD



Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM:	Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-164794-1									
Client Contact:		Phone:		State of Origin:	Page: Page 1 of 1									
Shipping/Receiving		E-Mail:	Diana.Mockler@et.eurofins.com	Illinois	Job #: 500-221573-2									
Company:		Accreditations Required (See note): NELAP - Illinois												
Address:		Due Date Requested:												
13715 Rider Trail North,		10/3/2022												
City:		TAT Requested (days):												
Earth City														
State, Zip:		PO #:												
MO, 63045		WO #:												
Phone:		Project #:												
314-298-8666(Tel) 314-298-8757(Fax)		50011612												
Email:		SSOW#:												
Project Name:		Site:												
Powerton CCR		MWG - Powerton												
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, On-water, In-tissue, A=As)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PreSep_21 Standard Target List	904.0/PreSep_0 Standard Target List	R226R228 GFPC	Analysis Requested	Total Number of Containers	Special Instructions/Note:
MW-01 (500-221573-1)	8/30/22	09:32 Central	Water				X	X	X	X			3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-02 (500-221573-2)	8/30/22	10:48 Central	Water				X	X	X	X			3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-03 (500-221573-3)	8/30/22	11:34 Central	Water				X	X	X	X			3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-04 (500-221573-4)	8/30/22	12:37 Central	Water				X	X	X	X			3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-05 (500-221573-5)	8/30/22	13:25 Central	Water				X	X	X	X			3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-15 (500-221573-6)	8/30/22	08:42 Central	Water				X	X	X	X			3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
Duplicate (500-221573-7)	8/30/22	Central	Water				X	X	X	X			3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no

Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontractor 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
 Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: *Shin Hood* 8/31/22 1415
 Relinquished by: *FED EX* 8/31/22 1415
 Relinquished by: _____ Date/Time: _____
 Custody Seals Intact: _____ Custody Seal No.: _____
 Δ Yes Δ No

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

Method of Shipment: _____ Date/Time: _____
 Received by: *FED EX* Date/Time: _____
 Received by: *Victor Cochran* Date/Time: **SEP 01 2022 0825**
 Received by: **Autumn R. Johnson** Date/Time: _____
 Cooler Temperature(s) °C and Other Remarks: _____



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-221573-2

Login Number: 221573

List Number: 1

Creator: Scott, Sherri L

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5,2.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-221573-2

Login Number: 221573

List Number: 2

Creator: Booker, Autumn R

List Source: Eurofins St. Louis

List Creation: 09/01/22 11:04 AM

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



Lab Chronicle

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

Job ID: 500-221573-2

Client Sample ID: MW-01
Date Collected: 08/30/22 09:32
Date Received: 08/31/22 09:30

Lab Sample ID: 500-221573-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			581008	TJ	EET SL	09/06/22 15:03
Total/NA	Analysis	903.0		1	583796	CLP	EET SL	09/28/22 17:06
Total/NA	Prep	PrecSep_0			582886	MLK	EET SL	09/20/22 15:24
Total/NA	Analysis	904.0		1	584224	FLC	EET SL	09/30/22 12:09
Total/NA	Analysis	Ra226_Ra228		1	584450	CAH	EET SL	10/03/22 13:21

Client Sample ID: MW-02
Date Collected: 08/30/22 10:48
Date Received: 08/31/22 09:30

Lab Sample ID: 500-221573-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			581008	TJ	EET SL	09/06/22 15:03
Total/NA	Analysis	903.0		1	583796	CLP	EET SL	09/28/22 17:06
Total/NA	Prep	PrecSep_0			582886	MLK	EET SL	09/20/22 15:24
Total/NA	Analysis	904.0		1	584224	FLC	EET SL	09/30/22 12:09
Total/NA	Analysis	Ra226_Ra228		1	584450	CAH	EET SL	10/03/22 13:21

Client Sample ID: MW-03
Date Collected: 08/30/22 11:34
Date Received: 08/31/22 09:30

Lab Sample ID: 500-221573-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			581008	TJ	EET SL	09/06/22 15:03
Total/NA	Analysis	903.0		1	583796	CLP	EET SL	09/28/22 17:06
Total/NA	Prep	PrecSep_0			582886	MLK	EET SL	09/20/22 15:24
Total/NA	Analysis	904.0		1	584224	FLC	EET SL	09/30/22 12:10
Total/NA	Analysis	Ra226_Ra228		1	584450	CAH	EET SL	10/03/22 13:21

Client Sample ID: MW-04
Date Collected: 08/30/22 12:37
Date Received: 08/31/22 09:30

Lab Sample ID: 500-221573-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			581008	TJ	EET SL	09/06/22 15:03
Total/NA	Analysis	903.0		1	583796	CLP	EET SL	09/28/22 17:06
Total/NA	Prep	PrecSep_0			582886	MLK	EET SL	09/20/22 15:24
Total/NA	Analysis	904.0		1	584224	FLC	EET SL	09/30/22 12:10
Total/NA	Analysis	Ra226_Ra228		1	584450	CAH	EET SL	10/03/22 13:21

Lab Chronicle

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

Job ID: 500-221573-2

Client Sample ID: MW-05
Date Collected: 08/30/22 13:25
Date Received: 08/31/22 09:30

Lab Sample ID: 500-221573-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			581008	TJ	EET SL	09/06/22 15:03
Total/NA	Analysis	903.0		1	583796	CLP	EET SL	09/28/22 17:06
Total/NA	Prep	PrecSep_0			582886	MLK	EET SL	09/20/22 15:24
Total/NA	Analysis	904.0		1	584273	FLC	EET SL	09/30/22 12:10
Total/NA	Analysis	Ra226_Ra228		1	584450	CAH	EET SL	10/03/22 13:21

Client Sample ID: MW-10
Date Collected: 08/30/22 08:42
Date Received: 08/31/22 09:30

Lab Sample ID: 500-221573-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			581008	TJ	EET SL	09/06/22 15:03
Total/NA	Analysis	903.0		1	583796	CLP	EET SL	09/28/22 17:06
Total/NA	Prep	PrecSep_0			582886	MLK	EET SL	09/20/22 15:24
Total/NA	Analysis	904.0		1	584273	FLC	EET SL	09/30/22 12:11
Total/NA	Analysis	Ra226_Ra228		1	584450	CAH	EET SL	10/03/22 13:21

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

Lab Sample ID: 500-221573-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			581076	TJ	EET SL	09/07/22 12:48
Total/NA	Analysis	903.0		1	583994	FLC	EET SL	09/29/22 08:04
Total/NA	Prep	PrecSep_0			583206	ASG	EET SL	09/22/22 15:49
Total/NA	Analysis	904.0		1	583994	FLC	EET SL	09/29/22 12:10
Total/NA	Analysis	Ra226_Ra228		1	584089	CLP	EET SL	09/29/22 18:28

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 500-221573-2

Laboratory: Eurofins St. Louis

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

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

1

2

3

4

5

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9

10

11

12

13

14

Tracer/Carrier Summary

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

Job ID: 500-221573-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (40-110)
500-221573-1	MW-01	92.8
500-221573-2	MW-02	97.0
500-221573-3	MW-03	98.3
500-221573-4	MW-04	95.3
500-221573-5	MW-05	93.3
500-221573-6	MW-10	97.3
500-221573-7	Duplicate	96.8
LCS 160-581008/2-A	Lab Control Sample	98.0
LCS 160-581076/2-A	Lab Control Sample	95.3
MB 160-581008/1-A	Method Blank	99.0
MB 160-581076/1-A	Method Blank	95.6

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (40-110)	Y (40-110)
500-221573-1	MW-01	88.9	86.4
500-221573-2	MW-02	92.4	89.0
500-221573-3	MW-03	92.4	84.5
500-221573-4	MW-04	91.6	86.7
500-221573-5	MW-05	96.1	87.5
500-221573-6	MW-10	92.9	80.7
500-221573-7	Duplicate	91.4	85.6
LCS 160-582886/2-A	Lab Control Sample	83.0	86.4
LCS 160-583206/2-A	Lab Control Sample	94.8	85.6
MB 160-582886/1-A	Method Blank	88.0	86.4
MB 160-583206/1-A	Method Blank	80.0	83.4

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 12/16/2022 10:19:13 AM

JOB DESCRIPTION

Powerton CCR

JOB NUMBER

500-225445-1

Eurofins Chicago

Job Notes

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Case Narrative

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

Job ID: 500-225445-1

Job ID: 500-225445-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-225445-1

Comments

No additional comments.

Receipt

The samples were received on 11/15/2022 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 -0.9° C and 0.5° C.

Metals

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

General Chemistry

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

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Method Summary

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

Job ID: 500-225445-1

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 PEN
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

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

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

Job ID: 500-225445-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-225445-1	MW-05	Water	11/14/22 13:31	11/15/22 10:00
500-225445-2	MW-02	Water	11/14/22 14:26	11/15/22 10:00
500-225445-3	MW-03	Water	11/14/22 15:15	11/15/22 10:00
500-225445-4	MW-04	Water	11/14/22 16:25	11/15/22 10:00
500-225445-5	MW-01	Water	11/15/22 09:56	11/16/22 10:30
500-225445-6	MW-10	Water	11/15/22 11:21	11/16/22 10:30
500-225445-7	Duplicate	Water	11/15/22 00:00	11/16/22 10:30

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Client Sample Results

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

Job ID: 500-225445-1

Client Sample ID: MW-05
Date Collected: 11/14/22 13:31
Date Received: 11/15/22 10:00

Lab Sample ID: 500-225445-1
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		11/30/22 18:17	12/01/22 13:43	1
Arsenic	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 13:43	1
Barium	0.072		0.0025		mg/L		11/30/22 18:17	12/01/22 13:43	1
Beryllium	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 13:43	1
Boron	1.1		0.050		mg/L		11/30/22 18:17	12/01/22 13:43	1
Cadmium	<0.00050		0.00050		mg/L		11/30/22 18:17	12/01/22 13:43	1
Calcium	96		0.20		mg/L		11/30/22 18:17	12/01/22 13:43	1
Chromium	<0.0050		0.0050		mg/L		11/30/22 18:17	12/01/22 13:43	1
Cobalt	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 13:43	1
Lead	<0.00050		0.00050		mg/L		11/30/22 18:17	12/01/22 13:43	1
Lithium	<0.010		0.010		mg/L		11/30/22 18:17	12/01/22 13:43	1
Molybdenum	0.0064		0.0050		mg/L		11/30/22 18:17	12/01/22 13:43	1
Selenium	<0.0025		0.0025		mg/L		11/30/22 18:17	12/01/22 13:43	1
Thallium	<0.0020		0.0020		mg/L		11/30/22 18:17	12/01/22 13:43	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/21/22 10:20	11/22/22 08:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	600		10		mg/L			11/18/22 03:22	1
Chloride (SM 4500 Cl- E)	64		4.0		mg/L			11/30/22 11:16	2
Fluoride (SM 4500 F C)	0.29		0.10		mg/L			12/01/22 13:34	1
Sulfate (SM 4500 SO4 E)	93		50		mg/L			11/29/22 09:23	10

Client Sample Results

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

Job ID: 500-225445-1

Client Sample ID: MW-02
Date Collected: 11/14/22 14:26
Date Received: 11/15/22 10:00

Lab Sample ID: 500-225445-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/30/22 18:17	12/01/22 13:47	1
Arsenic	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 13:47	1
Barium	0.083		0.0025		mg/L		11/30/22 18:17	12/01/22 13:47	1
Beryllium	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 13:47	1
Boron	1.6		0.050		mg/L		11/30/22 18:17	12/01/22 13:47	1
Cadmium	<0.00050		0.00050		mg/L		11/30/22 18:17	12/01/22 13:47	1
Calcium	96		0.20		mg/L		11/30/22 18:17	12/01/22 13:47	1
Chromium	<0.0050		0.0050		mg/L		11/30/22 18:17	12/01/22 13:47	1
Cobalt	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 13:47	1
Lead	<0.00050		0.00050		mg/L		11/30/22 18:17	12/01/22 13:47	1
Lithium	<0.010		0.010		mg/L		11/30/22 18:17	12/01/22 13:47	1
Molybdenum	<0.0050		0.0050		mg/L		11/30/22 18:17	12/01/22 13:47	1
Selenium	<0.0025		0.0025		mg/L		11/30/22 18:17	12/01/22 13:47	1
Thallium	<0.0020		0.0020		mg/L		11/30/22 18:17	12/01/22 13:47	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/21/22 10:20	11/22/22 09:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	480		10		mg/L			11/18/22 03:29	1
Chloride (SM 4500 Cl- E)	49		20		mg/L			11/30/22 12:22	10
Fluoride (SM 4500 F C)	0.21		0.10		mg/L			12/01/22 13:37	1
Sulfate (SM 4500 SO4 E)	63		50		mg/L			11/29/22 09:23	10

Client Sample Results

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

Job ID: 500-225445-1

Client Sample ID: MW-03
Date Collected: 11/14/22 15:15
Date Received: 11/15/22 10:00

Lab Sample ID: 500-225445-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/30/22 18:17	12/01/22 13:50	1
Arsenic	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 13:50	1
Barium	0.11		0.0025		mg/L		11/30/22 18:17	12/01/22 13:50	1
Beryllium	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 13:50	1
Boron	0.42		0.050		mg/L		11/30/22 18:17	12/01/22 13:50	1
Cadmium	<0.00050		0.00050		mg/L		11/30/22 18:17	12/01/22 13:50	1
Calcium	81		0.20		mg/L		11/30/22 18:17	12/01/22 13:50	1
Chromium	<0.0050		0.0050		mg/L		11/30/22 18:17	12/01/22 13:50	1
Cobalt	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 13:50	1
Lead	<0.00050		0.00050		mg/L		11/30/22 18:17	12/01/22 13:50	1
Lithium	<0.010		0.010		mg/L		11/30/22 18:17	12/01/22 13:50	1
Molybdenum	<0.0050		0.0050		mg/L		11/30/22 18:17	12/01/22 13:50	1
Selenium	<0.0025		0.0025		mg/L		11/30/22 18:17	12/01/22 13:50	1
Thallium	<0.0020		0.0020		mg/L		11/30/22 18:17	12/01/22 13:50	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/21/22 10:20	11/22/22 09:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	430		10		mg/L			11/18/22 03:35	1
Chloride (SM 4500 Cl- E)	49		10		mg/L			11/30/22 12:23	5
Fluoride (SM 4500 F C)	0.28		0.10		mg/L			12/01/22 13:40	1
Sulfate (SM 4500 SO4 E)	44		25		mg/L			11/29/22 09:23	5

Client Sample Results

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

Job ID: 500-225445-1

Client Sample ID: MW-04

Lab Sample ID: 500-225445-4

Date Collected: 11/14/22 16:25

Matrix: Water

Date Received: 11/15/22 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		11/30/22 18:17	12/01/22 13:54	1
Arsenic	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 13:54	1
Barium	0.080		0.0025		mg/L		11/30/22 18:17	12/01/22 13:54	1
Beryllium	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 13:54	1
Boron	0.84		0.050		mg/L		11/30/22 18:17	12/01/22 13:54	1
Cadmium	<0.00050		0.00050		mg/L		11/30/22 18:17	12/01/22 13:54	1
Calcium	110		0.20		mg/L		11/30/22 18:17	12/01/22 13:54	1
Chromium	<0.0050		0.0050		mg/L		11/30/22 18:17	12/01/22 13:54	1
Cobalt	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 13:54	1
Lead	<0.00050		0.00050		mg/L		11/30/22 18:17	12/01/22 13:54	1
Lithium	<0.010		0.010		mg/L		11/30/22 18:17	12/01/22 13:54	1
Molybdenum	<0.0050		0.0050		mg/L		11/30/22 18:17	12/01/22 13:54	1
Selenium	0.0074		0.0025		mg/L		11/30/22 18:17	12/01/22 13:54	1
Thallium	<0.0020		0.0020		mg/L		11/30/22 18:17	12/01/22 13:54	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/21/22 10:20	11/22/22 09:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	570		10		mg/L			11/18/22 03:37	1
Chloride (SM 4500 Cl- E)	62		10		mg/L			11/30/22 12:23	5
Fluoride (SM 4500 F C)	0.20		0.10		mg/L			12/01/22 13:43	1
Sulfate (SM 4500 SO4 E)	41		25		mg/L			11/29/22 09:24	5

Client Sample Results

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

Job ID: 500-225445-1

Client Sample ID: MW-01

Lab Sample ID: 500-225445-5

Date Collected: 11/15/22 09:56

Matrix: Water

Date Received: 11/16/22 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/30/22 18:17	12/01/22 14:18	1
Arsenic	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 14:18	1
Barium	0.086		0.0025		mg/L		11/30/22 18:17	12/01/22 14:18	1
Beryllium	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 14:18	1
Boron	0.74		0.050		mg/L		11/30/22 18:17	12/01/22 14:18	1
Cadmium	<0.00050		0.00050		mg/L		11/30/22 18:17	12/01/22 14:18	1
Calcium	110		0.20		mg/L		11/30/22 18:17	12/01/22 14:18	1
Chromium	<0.0050		0.0050		mg/L		11/30/22 18:17	12/01/22 14:18	1
Cobalt	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 14:18	1
Lead	<0.00050		0.00050		mg/L		11/30/22 18:17	12/01/22 14:18	1
Lithium	<0.010		0.010		mg/L		11/30/22 18:17	12/01/22 14:18	1
Molybdenum	<0.0050		0.0050		mg/L		11/30/22 18:17	12/01/22 14:18	1
Selenium	<0.0025		0.0025		mg/L		11/30/22 18:17	12/01/22 14:18	1
Thallium	<0.0020		0.0020		mg/L		11/30/22 18:17	12/01/22 14:18	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/21/22 10:20	11/22/22 09:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	530		10		mg/L			11/18/22 03:40	1
Chloride (SM 4500 Cl- E)	47		10		mg/L			11/30/22 12:23	5
Fluoride (SM 4500 F C)	0.10		0.10		mg/L			12/01/22 10:09	1
Sulfate (SM 4500 SO4 E)	45		25		mg/L			11/29/22 09:24	5

Client Sample Results

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

Job ID: 500-225445-1

Client Sample ID: MW-10

Lab Sample ID: 500-225445-6

Date Collected: 11/15/22 11:21

Matrix: Water

Date Received: 11/16/22 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/30/22 18:17	12/01/22 14:21	1
Arsenic	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 14:21	1
Barium	0.20		0.0025		mg/L		11/30/22 18:17	12/01/22 14:21	1
Beryllium	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 14:21	1
Boron	0.44		0.050		mg/L		11/30/22 18:17	12/01/22 14:21	1
Cadmium	<0.00050		0.00050		mg/L		11/30/22 18:17	12/01/22 14:21	1
Calcium	99		0.20		mg/L		11/30/22 18:17	12/01/22 14:21	1
Chromium	<0.0050		0.0050		mg/L		11/30/22 18:17	12/01/22 14:21	1
Cobalt	0.0052		0.0010		mg/L		11/30/22 18:17	12/01/22 14:21	1
Lead	<0.00050		0.00050		mg/L		11/30/22 18:17	12/01/22 14:21	1
Lithium	<0.010		0.010		mg/L		11/30/22 18:17	12/01/22 14:21	1
Molybdenum	<0.0050		0.0050		mg/L		11/30/22 18:17	12/01/22 14:21	1
Selenium	<0.0025		0.0025		mg/L		11/30/22 18:17	12/01/22 14:21	1
Thallium	<0.0020		0.0020		mg/L		11/30/22 18:17	12/01/22 14:21	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/21/22 10:20	11/22/22 09:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	470		10		mg/L			11/18/22 03:42	1
Chloride (SM 4500 Cl- E)	49		10		mg/L			11/30/22 12:24	5
Fluoride (SM 4500 F C)	0.28		0.10		mg/L			12/01/22 10:09	1
Sulfate (SM 4500 SO4 E)	48		25		mg/L			11/29/22 09:24	5

Client Sample Results

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

Job ID: 500-225445-1

Client Sample ID: Duplicate

Lab Sample ID: 500-225445-7

Date Collected: 11/15/22 00:00

Matrix: Water

Date Received: 11/16/22 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/30/22 18:17	12/01/22 14:25	1
Arsenic	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 14:25	1
Barium	0.20		0.0025		mg/L		11/30/22 18:17	12/01/22 14:25	1
Beryllium	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 14:25	1
Boron	0.43		0.050		mg/L		11/30/22 18:17	12/01/22 14:25	1
Cadmium	<0.00050		0.00050		mg/L		11/30/22 18:17	12/01/22 14:25	1
Calcium	97		0.20		mg/L		11/30/22 18:17	12/01/22 14:25	1
Chromium	<0.0050		0.0050		mg/L		11/30/22 18:17	12/01/22 14:25	1
Cobalt	0.0036		0.0010		mg/L		11/30/22 18:17	12/01/22 14:25	1
Lead	<0.00050		0.00050		mg/L		11/30/22 18:17	12/01/22 14:25	1
Lithium	<0.010		0.010		mg/L		11/30/22 18:17	12/01/22 14:25	1
Molybdenum	<0.0050		0.0050		mg/L		11/30/22 18:17	12/01/22 14:25	1
Selenium	<0.0025		0.0025		mg/L		11/30/22 18:17	12/01/22 14:25	1
Thallium	<0.0020		0.0020		mg/L		11/30/22 18:17	12/01/22 14:25	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/21/22 10:20	11/22/22 09:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	450		10		mg/L			11/18/22 03:45	1
Chloride (SM 4500 Cl- E)	49		10		mg/L			11/30/22 12:24	5
Fluoride (SM 4500 F C)	0.29		0.10		mg/L			12/01/22 10:09	1
Sulfate (SM 4500 SO4 E)	48		25		mg/L			11/29/22 09:24	5

Definitions/Glossary

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

Job ID: 500-225445-1

Qualifiers

Metals

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

Glossary

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

QC Association Summary

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

Job ID: 500-225445-1

Metals

Prep Batch: 686316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-225445-1	MW-05	Total/NA	Water	7470A	
500-225445-2	MW-02	Total/NA	Water	7470A	
500-225445-3	MW-03	Total/NA	Water	7470A	
500-225445-4	MW-04	Total/NA	Water	7470A	
500-225445-5	MW-01	Total/NA	Water	7470A	
500-225445-6	MW-10	Total/NA	Water	7470A	
500-225445-7	Duplicate	Total/NA	Water	7470A	
MB 500-686316/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-686316/13-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 686552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-225445-1	MW-05	Total/NA	Water	7470A	686316
500-225445-2	MW-02	Total/NA	Water	7470A	686316
500-225445-3	MW-03	Total/NA	Water	7470A	686316
500-225445-4	MW-04	Total/NA	Water	7470A	686316
500-225445-5	MW-01	Total/NA	Water	7470A	686316
500-225445-6	MW-10	Total/NA	Water	7470A	686316
500-225445-7	Duplicate	Total/NA	Water	7470A	686316
MB 500-686316/12-A	Method Blank	Total/NA	Water	7470A	686316
LCS 500-686316/13-A	Lab Control Sample	Total/NA	Water	7470A	686316

Prep Batch: 687596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-225445-1	MW-05	Total Recoverable	Water	3005A	
500-225445-2	MW-02	Total Recoverable	Water	3005A	
500-225445-3	MW-03	Total Recoverable	Water	3005A	
500-225445-4	MW-04	Total Recoverable	Water	3005A	
500-225445-5	MW-01	Total Recoverable	Water	3005A	
500-225445-6	MW-10	Total Recoverable	Water	3005A	
500-225445-7	Duplicate	Total Recoverable	Water	3005A	
MB 500-687596/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-687596/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-225445-4 MS	MW-04	Total Recoverable	Water	3005A	
500-225445-4 MSD	MW-04	Total Recoverable	Water	3005A	
500-225445-4 DU	MW-04	Total Recoverable	Water	3005A	

Analysis Batch: 687785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-225445-1	MW-05	Total Recoverable	Water	6020A	687596
500-225445-2	MW-02	Total Recoverable	Water	6020A	687596
500-225445-3	MW-03	Total Recoverable	Water	6020A	687596
500-225445-4	MW-04	Total Recoverable	Water	6020A	687596
500-225445-5	MW-01	Total Recoverable	Water	6020A	687596
500-225445-6	MW-10	Total Recoverable	Water	6020A	687596
500-225445-7	Duplicate	Total Recoverable	Water	6020A	687596
MB 500-687596/1-A	Method Blank	Total Recoverable	Water	6020A	687596
LCS 500-687596/2-A	Lab Control Sample	Total Recoverable	Water	6020A	687596
500-225445-4 MS	MW-04	Total Recoverable	Water	6020A	687596
500-225445-4 MSD	MW-04	Total Recoverable	Water	6020A	687596
500-225445-4 DU	MW-04	Total Recoverable	Water	6020A	687596

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QC Association Summary

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

Job ID: 500-225445-1

General Chemistry

Analysis Batch: 603148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-225445-1	MW-05	Total/NA	Water	SM 4500 F C	
500-225445-2	MW-02	Total/NA	Water	SM 4500 F C	
500-225445-3	MW-03	Total/NA	Water	SM 4500 F C	
500-225445-4	MW-04	Total/NA	Water	SM 4500 F C	
MB 400-603148/10	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-603148/13	Lab Control Sample	Total/NA	Water	SM 4500 F C	
MRL 400-603148/12	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 603174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-225445-5	MW-01	Total/NA	Water	SM 4500 F C	
500-225445-6	MW-10	Total/NA	Water	SM 4500 F C	
500-225445-7	Duplicate	Total/NA	Water	SM 4500 F C	
MB 400-603174/10	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-603174/13	Lab Control Sample	Total/NA	Water	SM 4500 F C	
MRL 400-603174/12	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 685754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-225445-1	MW-05	Total/NA	Water	SM 2540C	
500-225445-2	MW-02	Total/NA	Water	SM 2540C	
500-225445-3	MW-03	Total/NA	Water	SM 2540C	
500-225445-4	MW-04	Total/NA	Water	SM 2540C	
500-225445-5	MW-01	Total/NA	Water	SM 2540C	
500-225445-6	MW-10	Total/NA	Water	SM 2540C	
500-225445-7	Duplicate	Total/NA	Water	SM 2540C	
MB 500-685754/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-685754/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-225445-1 MS	MW-05	Total/NA	Water	SM 2540C	
500-225445-1 DU	MW-05	Total/NA	Water	SM 2540C	
500-225445-2 DU	MW-02	Total/NA	Water	SM 2540C	

Analysis Batch: 687313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-225445-1	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-225445-2	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-225445-3	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-225445-4	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-225445-5	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-225445-6	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-225445-7	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-687313/52	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-687313/53	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 687566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-225445-1	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-225445-2	MW-02	Total/NA	Water	SM 4500 Cl- E	
500-225445-3	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-225445-4	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-225445-5	MW-01	Total/NA	Water	SM 4500 Cl- E	

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QC Association Summary

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

Job ID: 500-225445-1

General Chemistry (Continued)

Analysis Batch: 687566 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-225445-6	MW-10	Total/NA	Water	SM 4500 CI- E	
500-225445-7	Duplicate	Total/NA	Water	SM 4500 CI- E	
MB 500-687566/100	Method Blank	Total/NA	Water	SM 4500 CI- E	
MB 500-687566/145	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-687566/101	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
LCS 500-687566/146	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
500-225445-2 MS	MW-02	Total/NA	Water	SM 4500 CI- E	
500-225445-2 MSD	MW-02	Total/NA	Water	SM 4500 CI- E	

QC Sample Results

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

Job ID: 500-225445-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-687596/1-A
Matrix: Water
Analysis Batch: 687785

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 687596

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0030		0.0030		mg/L		11/30/22 18:17	12/01/22 13:36	1
Arsenic	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 13:36	1
Barium	<0.0025		0.0025		mg/L		11/30/22 18:17	12/01/22 13:36	1
Beryllium	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 13:36	1
Boron	<0.050		0.050		mg/L		11/30/22 18:17	12/01/22 13:36	1
Cadmium	<0.00050		0.00050		mg/L		11/30/22 18:17	12/01/22 13:36	1
Calcium	<0.20		0.20		mg/L		11/30/22 18:17	12/01/22 13:36	1
Chromium	<0.0050		0.0050		mg/L		11/30/22 18:17	12/01/22 13:36	1
Cobalt	<0.0010		0.0010		mg/L		11/30/22 18:17	12/01/22 13:36	1
Lead	<0.00050		0.00050		mg/L		11/30/22 18:17	12/01/22 13:36	1
Lithium	<0.010		0.010		mg/L		11/30/22 18:17	12/01/22 13:36	1
Molybdenum	<0.0050		0.0050		mg/L		11/30/22 18:17	12/01/22 13:36	1
Selenium	<0.0025		0.0025		mg/L		11/30/22 18:17	12/01/22 13:36	1
Thallium	<0.0020		0.0020		mg/L		11/30/22 18:17	12/01/22 13:36	1

Lab Sample ID: LCS 500-687596/2-A
Matrix: Water
Analysis Batch: 687785

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 687596

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.100	0.0923		mg/L		92	80 - 120
Barium	2.00	2.03		mg/L		101	80 - 120
Beryllium	0.0500	0.0488		mg/L		98	80 - 120
Boron	1.00	0.999		mg/L		100	80 - 120
Cadmium	0.0500	0.0486		mg/L		97	80 - 120
Calcium	10.0	9.85		mg/L		99	80 - 120
Chromium	0.200	0.206		mg/L		103	80 - 120
Cobalt	0.500	0.514		mg/L		103	80 - 120
Lead	0.100	0.104		mg/L		104	80 - 120
Lithium	0.500	0.489		mg/L		98	80 - 120
Molybdenum	1.00	0.945		mg/L		94	80 - 120
Selenium	0.100	0.0985		mg/L		99	80 - 120
Thallium	0.100	0.107		mg/L		107	80 - 120

Lab Sample ID: 500-225445-4 MS
Matrix: Water
Analysis Batch: 687785

Client Sample ID: MW-04
Prep Type: Total Recoverable
Prep Batch: 687596

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Antimony	<0.0030		0.500	0.518		mg/L		104	75 - 125
Arsenic	<0.0010		0.100	0.0940		mg/L		93	75 - 125
Barium	0.080		2.00	2.09		mg/L		101	75 - 125
Beryllium	<0.0010		0.0500	0.0469		mg/L		94	75 - 125
Boron	0.84		1.00	1.80		mg/L		95	75 - 125
Cadmium	<0.00050		0.0500	0.0490		mg/L		98	75 - 125
Calcium	110		10.0	113	4	mg/L		70	75 - 125
Chromium	<0.0050		0.200	0.202		mg/L		101	75 - 125
Cobalt	<0.0010		0.500	0.491		mg/L		98	75 - 125

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QC Sample Results

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

Job ID: 500-225445-1

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

Lab Sample ID: 500-225445-4 MS
Matrix: Water
Analysis Batch: 687785

Client Sample ID: MW-04
Prep Type: Total Recoverable
Prep Batch: 687596

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	<0.00050		0.100	0.103		mg/L		103	75 - 125
Lithium	<0.010		0.500	0.477		mg/L		95	75 - 125
Molybdenum	<0.0050		1.00	0.972		mg/L		97	75 - 125
Selenium	0.0074		0.100	0.106		mg/L		99	75 - 125
Thallium	<0.0020		0.100	0.105		mg/L		105	75 - 125

Lab Sample ID: 500-225445-4 MSD
Matrix: Water
Analysis Batch: 687785

Client Sample ID: MW-04
Prep Type: Total Recoverable
Prep Batch: 687596

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.0030		0.500	0.531		mg/L		106	75 - 125	2	20
Arsenic	<0.0010		0.100	0.0957		mg/L		95	75 - 125	2	20
Barium	0.080		2.00	2.08		mg/L		100	75 - 125	1	20
Beryllium	<0.0010		0.0500	0.0508		mg/L		102	75 - 125	8	20
Boron	0.84		1.00	1.87		mg/L		103	75 - 125	4	20
Cadmium	<0.00050		0.0500	0.0493		mg/L		99	75 - 125	1	20
Calcium	110		10.0	117	4	mg/L		112	75 - 125	4	20
Chromium	<0.0050		0.200	0.205		mg/L		103	75 - 125	2	20
Cobalt	<0.0010		0.500	0.504		mg/L		101	75 - 125	3	20
Lead	<0.00050		0.100	0.104		mg/L		104	75 - 125	1	20
Lithium	<0.010		0.500	0.484		mg/L		96	75 - 125	2	20
Molybdenum	<0.0050		1.00	0.992		mg/L		99	75 - 125	2	20
Selenium	0.0074		0.100	0.107		mg/L		100	75 - 125	1	20
Thallium	<0.0020		0.100	0.106		mg/L		106	75 - 125	1	20

Lab Sample ID: 500-225445-4 DU
Matrix: Water
Analysis Batch: 687785

Client Sample ID: MW-04
Prep Type: Total Recoverable
Prep Batch: 687596

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.0030		<0.0030		mg/L		NC	20
Arsenic	<0.0010		<0.0010		mg/L		NC	20
Barium	0.080		0.0806		mg/L		0.7	20
Beryllium	<0.0010		<0.0010		mg/L		NC	20
Boron	0.84		0.838		mg/L		0.4	20
Cadmium	<0.00050		<0.00050		mg/L		NC	20
Calcium	110		106		mg/L		0.08	20
Chromium	<0.0050		<0.0050		mg/L		NC	20
Cobalt	<0.0010		<0.0010		mg/L		NC	20
Lead	<0.00050		<0.00050		mg/L		NC	20
Lithium	<0.010		<0.010		mg/L		NC	20
Molybdenum	<0.0050		<0.0050		mg/L		NC	20
Selenium	0.0074		0.00750		mg/L		0.8	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

QC Sample Results

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

Job ID: 500-225445-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-686316/12-A
Matrix: Water
Analysis Batch: 686552

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 686316

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/21/22 10:20	11/22/22 08:17	1

Lab Sample ID: LCS 500-686316/13-A
Matrix: Water
Analysis Batch: 686552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 686316

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00198	0.00180		mg/L		91	80 - 120

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

Lab Sample ID: MB 500-685754/1
Matrix: Water
Analysis Batch: 685754

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			11/18/22 03:17	1

Lab Sample ID: LCS 500-685754/2
Matrix: Water
Analysis Batch: 685754

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: 500-225445-1 MS
Matrix: Water
Analysis Batch: 685754

Client Sample ID: MW-05
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	600		250	870		mg/L		108	75 - 125

Lab Sample ID: 500-225445-1 DU
Matrix: Water
Analysis Batch: 685754

Client Sample ID: MW-05
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	600		574		mg/L		4	5

Lab Sample ID: 500-225445-2 DU
Matrix: Water
Analysis Batch: 685754

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	480		492		mg/L		3	5

QC Sample Results

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

Job ID: 500-225445-1

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-687566/100
Matrix: Water
Analysis Batch: 687566

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			11/30/22 11:09	1

Lab Sample ID: MB 500-687566/145
Matrix: Water
Analysis Batch: 687566

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			11/30/22 12:21	1

Lab Sample ID: LCS 500-687566/101
Matrix: Water
Analysis Batch: 687566

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	21.9		mg/L		109	85 - 115

Lab Sample ID: LCS 500-687566/146
Matrix: Water
Analysis Batch: 687566

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	21.4		mg/L		107	85 - 115

Lab Sample ID: 500-225445-2 MS
Matrix: Water
Analysis Batch: 687566

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	49		20.0	67.6		mg/L		91	75 - 125

Lab Sample ID: 500-225445-2 MSD
Matrix: Water
Analysis Batch: 687566

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	49		20.0	67.0		mg/L		88	75 - 125	1	20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-603148/10
Matrix: Water
Analysis Batch: 603148

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			12/01/22 13:04	1

QC Sample Results

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

Job ID: 500-225445-1

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 400-603148/13
Matrix: Water
Analysis Batch: 603148

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	5.00	5.02		mg/L		100	90 - 110

Lab Sample ID: MRL 400-603148/12
Matrix: Water
Analysis Batch: 603148

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.100	0.109		mg/L		109	

Lab Sample ID: MB 400-603174/10
Matrix: Water
Analysis Batch: 603174

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			12/01/22 10:09	1

Lab Sample ID: LCS 400-603174/13
Matrix: Water
Analysis Batch: 603174

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	5.00	5.02		mg/L		100	90 - 110

Lab Sample ID: MRL 400-603174/12
Matrix: Water
Analysis Batch: 603174

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.100	0.100		mg/L		100	

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-687313/52
Matrix: Water
Analysis Batch: 687313

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			11/29/22 09:16	1

Lab Sample ID: LCS 500-687313/53
Matrix: Water
Analysis Batch: 687313

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	22.0		mg/L		110	88 - 123

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

Chain of Custody Record

eurofins
 11/16/22

Client Information
 Client Contact: Michelle DeJan
 Company: KPRG and Associates, Inc.
 Address: 14665 West Lisbon Road, Suite 1A
 City: Brookfield
 State, Zip: WI, 53005
 Phone: 262-781-0475(Tel)
 Email: mitcheld@kprginc.com
 Project Name: Powerion CCR
 Illinois Site: 50011812

Lab P/N, Carrier Tracking No(s):
 Lab P/N: MOCKLER DIANA J
 E-Mail: Diana.Mockler@et.eurofins.com
 State of Origin: _____

Due Date Requested: _____
TAT Requested (days): Standard
Compliance Project: Yes No
PO #: 4502081030
WO #: _____
Project #: 50011812
SSOW #: _____

Analysis Requested
 Job #: 500-22555925
 Page: 1 of 1
 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 - EDTA
 M - Hexane
 N - None
 O - AsNaO2
 P - Na2OAS
 Q - Na2SO3
 R - Na2S2O3
 S - H2SO4
 T - TSP Dodecahydrate
 U - Acetone
 V - MCAA
 W - pH 4-5
 Y - Tizma
 Z - other (specify)

Sample Identification

Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, etc.)	Field Filtered Sample (Yes or No)	Perform MSMSD (Yes or No)	903.0 - Standard Target List	Ra226Ra228_GFFC - Local Method	904.0 - Standard Target List	6020A, 7470A	2540C, 4500_F_C, SM4500_Cl_E, SM4500_SO4_E	Total Number of containers	Special Instructions/Note
MW-01	11/15/22	0956	G	Water	X	X	X	X	X	X	X	X	
MW-10	11/15/22	1121	G	Water	X	X	X	X	X	X	X	X	
Duplicate	11/15/22	-	G	Water	X	X	X	X	X	X	X	X	

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested I, II, III, IV, Other (specify) _____

Empty Kit Relinquished by: _____
Relinquished by: Kathryn Oule Date/Time: 11/15/22 1830 Company: KPRG
Relinquished by: _____ Date/Time: _____ Company: _____

Custody/Seals Intact: Yes No **Custody Seal No.:** _____

Received by: Michelle Mockler Date/Time: 11/15/22 1030 Company: FedEx
Received by: _____ Date/Time: _____ Company: _____

Cooler Temperature(s) °C and Other Remarks: -0.4 → 0.9

Special Instructions/Note: _____

Eurofins Chicago

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

Chain of Custody Record



Environment Test ng

Client Information		Sampler: <u>Kaelyn Sperle</u>		Lab PM: Mockler Diana J		Carrier Tracking No(s):		COC No. 500-106664-44025 1							
Client Contact: Mitchel Dolan		Phone: <u>262-278-1621</u>		E-Mail: Diana Mockler@et eurofins.com		State of Origin: <u>IL</u>		Page 1 of 1							
Company: KPRG and Associates Inc				PWSID		Analysis Requested									
Address: 14665 West Lisbon Road Suite 1A		Due Date Requested: <u>Standard</u>		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 903.0 - Standard Target List R226Ra228_GFP_C - Local Method 904.0 - Standard Target List 6020A, 7470A 2540C 4500_F_C SM4500_CLE SM4500_SO4_E		Total Number of containers		Job #: <u>500-225445</u>							
City: Brookfield		TAT Requested (days): <u>Standard</u>													
State Zip: WI 53005		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No													
Phone: 262-781-0475(Tel)		PO #: 4502081030													
Email: mitcheld@kprginc.com		WO #:													
Project Name: Powerton CCR		Project #: 50011612		SSOW#:		Preservation Codes		Other:							
Site: Illinois															
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 MS/MSD (Yes or No)	903.0 - Standard Target List	R226Ra228_GFP_C - Local Method	904.0 - Standard Target List	6020A, 7470A	2540C 4500_F_C SM4500_CLE SM4500_SO4_E	Total Number of containers	Special Instructions/Note	
				Preservation Code:											
1 MW-05		11/14/22	1331	G	Water	N	N	X	X	X	X	X			
2 MW-02		11/14/22	1426	G	Water	N	N	X	X	X	X	X			
3 MW-03		11/14/22	1515	G	Water	N	N	X	X	X	X	X			
4 MW-04		11/14/22	1625	G	Water	N	N	X	X	X	X	X			
					Water										
					Water										
					Water										
					Water										
					Water										
					Water										
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)									
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological						<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months									
Deliverable Requested I II III IV Other (specify)						Special Instructions/QC Requirements									
Empty Kit Relinquished by		Date		Time		Method of Shipment:									
Relinquished by: <u>Kaelyn Sperle</u>		Date/Time: <u>11/14/22/1830</u>		Company: <u>KPRG</u>		Received by: <u>FedEx</u>		Date/Time: <u>11/14/22/1830</u>		Company: <u>FedEx</u>					
Relinquished by:		Date/Time:		Company:		Received by: <u>Shirley Booth</u>		Date/Time: <u>11/15/22 1000</u>		Company: <u>WETA</u>					
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:					
Custody Seals Intact. <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks.		<u>1.0 - 70.5</u>									

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

SHIP DATE: 14NOV22
ACTWGT: 45.85 LB
CAD: 6994780/SSFE2341
DIMS: 24x15x15 IN

WESTMONT, IL 60559
UNITED STATES US

BILL THIRD PARTY

Part # 158297-435 RP

TO EUROFINS CHICAGO
EUROFINS CHICAGO
2417 BOND ST



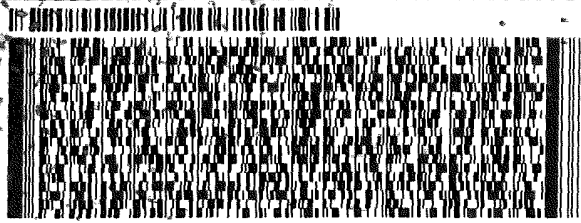
500-225445 Waybi

UNIVERSITY PARK IL 60484

(708) 634-6200

REF:

INV: DEPT



FedEx
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REL#
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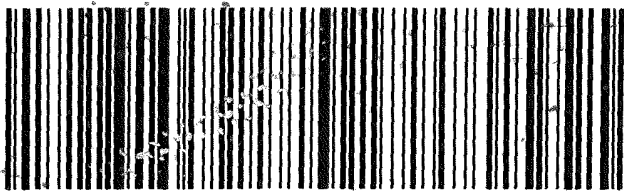
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PRIORITY OVERNIGHT

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

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 15NOV22
ACTWGT: 48.45 LB
CAD: 6994780/SSFE2341
DIMS: 24x13x14 IN

BILL THIRD PARTY

TO EUROFINs CHICAGO
EUROFINs CHICAGO
2417 BOND ST

UNIVERSITY PARK IL 60484

(708) 634-6200

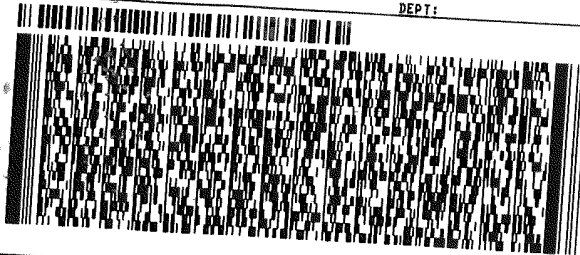
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500-225445 Waybl

DEPT:

Part # 156297-435, P/ROD, F/R, 06/23



FedEx
Express



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5 of 7
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PRIORITY OVERNIGHT

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Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler: Mockler, Diana J		Carrier Tracking No(s): 500-167516-1	
Client Contact: Shipping/Receiving		Phone: Diana.Mockler@et.eurofinsus.com		Page: Page 1 of 1	
Company: Eurofins Environment Testing Southeast,		Address: 3355 McLemore Drive,		Job #: 500-225445-1	
City: Pensacola		State: FL, 32514		Preservation Codes:	
Phone: 850-474-1001 (Tel) 850-478-2671 (Fax)		Email:		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 L - EDTA Z - other (specify)	
Project Name: Powertron CCR		Project #: 50011612		Other:	
Site: MWG - Powertron		SSOW#:			
Due Date Requested: 12/7/2022		TAT Requested (days):		Analysis Requested	
Sample Date		Sample Time		Sample Type (C=comp, G=grab)	
Sample Identification - Client ID (Lab ID)		Sample Time		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=air)	
MW-05 (500-225445-1)		11/14/22 13:31 Central		Water	
MW-02 (500-225445-2)		11/14/22 14:26 Central		Water	
MW-03 (500-225445-3)		11/14/22 15:15 Central		Water	
MW-04 (500-225445-4)		11/14/22 16:25 Central		Water	
Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		4500 F.C	
Total Number of Containers		X		Special Instructions/Note:	
1		1		1	
1		1		1	
1		1		1	

Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon out 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.

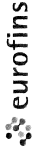
Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2
 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For Months

Empty Kit Relinquished by: Date: Time: Method of Shipment:
 Relinquished by: *Chui* Date: 11/15/22 Time: 14:55 Company: *ETA*
 Relinquished by: Date: Time: Company:
 Relinquished by: Date: Time: Company:

Custody Seals Intact: Custody Seal No.:
 Cooler Temperature(s) °C and Other Remarks: 11/17/22 GUV 3.2°C 108



Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler: Lab PM: Mockler, Diana J	Carrier Tracking No(s):	GOC No: 500-167585.1					
Client Contact: Shipping/Receiving		E-Mail: Diana.Mockler@et.eurofins.com	State of Origin: Illinois	Page: Page 1 of 1					
Company: Eurofins Environment Testing Southeast, 3355 McLemore Drive, Pensacola, FL, 32514		Accreditations Required (See note): NELAP - Illinois		Job #: 500-225445-1					
Address: 3355 McLemore Drive, Pensacola, FL, 32514		Analysis Requested							
Due Date Requested: 12/7/2022									
TAT Requested (days):									
PO #:	WO #:								
Project #: 50011612	SSOW#:								
Site: MWG - Powerton									
Sample Identification - Client ID (Lab ID)									
Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, ASAK)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500 F.C	Total Number of Containers	Special Instructions/Note:
500-225445-5	11/15/22	09:56 Central	Water	Water	X	X	X	1	
500-225445-6	11/15/22	11:21 Central	Water	Water	X	X	X	1	
500-225445-7	11/15/22	Central	Water	Water	X	X	X	1	
<p>Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Chicago attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago.</p>									
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
Unconfirmed					Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months				
Deliverable Requested: I, II, III, IV, Other (specify)					Special Instructions/QC Requirements:				
Empty Kit Relinquished by:					Method of Shipment:				
Date:					Time:				
Relinquished by: <i>William Cantepul</i>					Received by: Company <i>ETA</i>				
Date/Time: 11/16/22 1600					Date/Time:				
Relinquished by:					Received by: Company				
Date/Time:					Date/Time:				
Relinquished by:					Received by: Company				
Date/Time:					Date/Time: 11/17/22 842				
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No					Cooler Temperature(s) °C and Other Remarks: <i>1.8°C (18°F)</i>				



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-225445-1

Login Number: 225445

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	0.5,-0.9 samples not frozen
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-225445-1

Login Number: 225445

List Number: 4

Creator: Whitley, Adrian

List Source: Eurofins Pensacola

List Creation: 11/17/22 07:49 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.8°C IR8
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.	N/A	
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

Job ID: 500-225445-1

Client Sample ID: MW-05
Date Collected: 11/14/22 13:31
Date Received: 11/15/22 10:00

Lab Sample ID: 500-225445-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			687596	RN	EET CHI	11/30/22 18:17 - 11/30/22 18:47 ¹
Total Recoverable	Analysis	6020A		1	687785	FXG	EET CHI	12/01/22 13:43
Total/NA	Prep	7470A			686316	MJG	EET CHI	11/21/22 10:20 - 11/21/22 12:20 ¹
Total/NA	Analysis	7470A		1	686552	MJG	EET CHI	11/22/22 08:53
Total/NA	Analysis	SM 2540C		1	685754	CLB	EET CHI	11/18/22 03:22
Total/NA	Analysis	SM 4500 CI- E		2	687566	LP	EET CHI	11/30/22 11:16
Total/NA	Analysis	SM 4500 F C		1	603148	JP	EET PEN	12/01/22 13:34
Total/NA	Analysis	SM 4500 SO4 E		10	687313	LP	EET CHI	11/29/22 09:23

Client Sample ID: MW-02
Date Collected: 11/14/22 14:26
Date Received: 11/15/22 10:00

Lab Sample ID: 500-225445-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			687596	RN	EET CHI	11/30/22 18:17 - 11/30/22 18:47 ¹
Total Recoverable	Analysis	6020A		1	687785	FXG	EET CHI	12/01/22 13:47
Total/NA	Prep	7470A			686316	MJG	EET CHI	11/21/22 10:20 - 11/21/22 12:20 ¹
Total/NA	Analysis	7470A		1	686552	MJG	EET CHI	11/22/22 09:00
Total/NA	Analysis	SM 2540C		1	685754	CLB	EET CHI	11/18/22 03:29
Total/NA	Analysis	SM 4500 CI- E		10	687566	LP	EET CHI	11/30/22 12:22
Total/NA	Analysis	SM 4500 F C		1	603148	JP	EET PEN	12/01/22 13:37
Total/NA	Analysis	SM 4500 SO4 E		10	687313	LP	EET CHI	11/29/22 09:23

Client Sample ID: MW-03
Date Collected: 11/14/22 15:15
Date Received: 11/15/22 10:00

Lab Sample ID: 500-225445-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			687596	RN	EET CHI	11/30/22 18:17 - 11/30/22 18:47 ¹
Total Recoverable	Analysis	6020A		1	687785	FXG	EET CHI	12/01/22 13:50
Total/NA	Prep	7470A			686316	MJG	EET CHI	11/21/22 10:20 - 11/21/22 12:20 ¹
Total/NA	Analysis	7470A		1	686552	MJG	EET CHI	11/22/22 09:02
Total/NA	Analysis	SM 2540C		1	685754	CLB	EET CHI	11/18/22 03:35
Total/NA	Analysis	SM 4500 CI- E		5	687566	LP	EET CHI	11/30/22 12:23
Total/NA	Analysis	SM 4500 F C		1	603148	JP	EET PEN	12/01/22 13:40
Total/NA	Analysis	SM 4500 SO4 E		5	687313	LP	EET CHI	11/29/22 09:23

Client Sample ID: MW-04
Date Collected: 11/14/22 16:25
Date Received: 11/15/22 10:00

Lab Sample ID: 500-225445-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			687596	RN	EET CHI	11/30/22 18:17 - 11/30/22 18:47 ¹
Total Recoverable	Analysis	6020A		1	687785	FXG	EET CHI	12/01/22 13:54

Eurofins Chicago

Lab Chronicle

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

Job ID: 500-225445-1

Client Sample ID: MW-04
Date Collected: 11/14/22 16:25
Date Received: 11/15/22 10:00

Lab Sample ID: 500-225445-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			686316	MJG	EET CHI	11/21/22 10:20 - 11/21/22 12:20 ¹
Total/NA	Analysis	7470A		1	686552	MJG	EET CHI	11/22/22 09:04
Total/NA	Analysis	SM 2540C		1	685754	CLB	EET CHI	11/18/22 03:37
Total/NA	Analysis	SM 4500 CI- E		5	687566	LP	EET CHI	11/30/22 12:23
Total/NA	Analysis	SM 4500 F C		1	603148	JP	EET PEN	12/01/22 13:43
Total/NA	Analysis	SM 4500 SO4 E		5	687313	LP	EET CHI	11/29/22 09:24

Client Sample ID: MW-01
Date Collected: 11/15/22 09:56
Date Received: 11/16/22 10:30

Lab Sample ID: 500-225445-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			687596	RN	EET CHI	11/30/22 18:17 - 11/30/22 18:47 ¹
Total Recoverable	Analysis	6020A		1	687785	FXG	EET CHI	12/01/22 14:18
Total/NA	Prep	7470A			686316	MJG	EET CHI	11/21/22 10:20 - 11/21/22 12:20 ¹
Total/NA	Analysis	7470A		1	686552	MJG	EET CHI	11/22/22 09:06
Total/NA	Analysis	SM 2540C		1	685754	CLB	EET CHI	11/18/22 03:40
Total/NA	Analysis	SM 4500 CI- E		5	687566	LP	EET CHI	11/30/22 12:23
Total/NA	Analysis	SM 4500 F C		1	603174	JP	EET PEN	12/01/22 10:09
Total/NA	Analysis	SM 4500 SO4 E		5	687313	LP	EET CHI	11/29/22 09:24

Client Sample ID: MW-10
Date Collected: 11/15/22 11:21
Date Received: 11/16/22 10:30

Lab Sample ID: 500-225445-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			687596	RN	EET CHI	11/30/22 18:17 - 11/30/22 18:47 ¹
Total Recoverable	Analysis	6020A		1	687785	FXG	EET CHI	12/01/22 14:21
Total/NA	Prep	7470A			686316	MJG	EET CHI	11/21/22 10:20 - 11/21/22 12:20 ¹
Total/NA	Analysis	7470A		1	686552	MJG	EET CHI	11/22/22 09:08
Total/NA	Analysis	SM 2540C		1	685754	CLB	EET CHI	11/18/22 03:42
Total/NA	Analysis	SM 4500 CI- E		5	687566	LP	EET CHI	11/30/22 12:24
Total/NA	Analysis	SM 4500 F C		1	603174	JP	EET PEN	12/01/22 10:09
Total/NA	Analysis	SM 4500 SO4 E		5	687313	LP	EET CHI	11/29/22 09:24

Client Sample ID: Duplicate
Date Collected: 11/15/22 00:00
Date Received: 11/16/22 10:30

Lab Sample ID: 500-225445-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			687596	RN	EET CHI	11/30/22 18:17 - 11/30/22 18:47 ¹
Total Recoverable	Analysis	6020A		1	687785	FXG	EET CHI	12/01/22 14:25
Total/NA	Prep	7470A			686316	MJG	EET CHI	11/21/22 10:20 - 11/21/22 12:20 ¹
Total/NA	Analysis	7470A		1	686552	MJG	EET CHI	11/22/22 09:10

Eurofins Chicago

Lab Chronicle

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

Job ID: 500-225445-1

Client Sample ID: Duplicate

Lab Sample ID: 500-225445-7

Date Collected: 11/15/22 00:00

Matrix: Water

Date Received: 11/16/22 10:30

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Analysis	SM 2540C		1	685754	CLB	EET CHI	11/18/22 03:45
Total/NA	Analysis	SM 4500 Cl- E		5	687566	LP	EET CHI	11/30/22 12:24
Total/NA	Analysis	SM 4500 F C		1	603174	JP	EET PEN	12/01/22 10:09
Total/NA	Analysis	SM 4500 SO4 E		5	687313	LP	EET CHI	11/29/22 09:24

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

Laboratory References:

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

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Accreditation/Certification Summary

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

Job ID: 500-225445-1

Laboratory: Eurofins Chicago

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

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

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-23
ANAB	ISO/IEC 17025	L2471	02-23-23
Arkansas DEQ	State	88-0689	09-01-23
California	State	2510	06-30-23
Florida	NELAP	E81010	06-30-23
Georgia	State	E81010(FL)	06-30-23
Illinois	NELAP	200041	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-23
Kentucky (WW)	State	KY98030	12-31-22
Louisiana (All)	NELAP	30976	06-30-23
Louisiana (DW)	State	LA017	12-31-22
Maryland	State	233	09-30-23
Michigan	State	9912	06-30-23
North Carolina (WW/SW)	State	314	12-31-22
Oklahoma	NELAP	9810	08-31-23
Pennsylvania	NELAP	68-00467	01-31-23
South Carolina	State	96026	06-30-23
Tennessee	State	TN02907	06-30-23
Texas	NELAP	T104704286	09-30-23
US Fish & Wildlife	US Federal Programs	A22340	06-30-23
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-23
West Virginia DEP	State	136	03-31-23

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

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

Generated 12/16/2022 8:25:11 AM

JOB DESCRIPTION

Powerton CCR

JOB NUMBER

500-225445-2

Eurofins Chicago

Job Notes

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

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

Authorization



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Authorized for release by
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(219)252-7570



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Case Narrative

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

Job ID: 500-225445-2

Job ID: 500-225445-2

Laboratory: Eurofins Chicago

Narrative

**Job Narrative
500-225445-2**

Comments

No additional comments.

Receipt

The samples were received on 11/15/2022 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 -0.9° C and 0.5° C.

RAD

Methods 903.0, 9315: Radium-226 batch 590929

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-05 (500-225445-1), MW-02 (500-225445-2), MW-03 (500-225445-3), MW-04 (500-225445-4), MW-01 (500-225445-5), MW-10 (500-225445-6), Duplicate (500-225445-7), (LCS 160-590929/2-A), (MB 160-590929/1-A), (240-176540-N-2-A), (240-176540-M-2-A MS) and (240-176540-J-2-A MSD)

Methods 904.0, 9320: Radium 228 batch 590934

The LCS recovered at (140%). The limits in our LIMS system at 75-125 reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of (62-148%) per method requirements. The LCS passes, no further action is required (LCS 160-590934/2-A)

Methods 904.0, 9320: Radium 228 batch 590934

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-05 (500-225445-1), MW-02 (500-225445-2), MW-03 (500-225445-3), MW-04 (500-225445-4), MW-01 (500-225445-5), MW-10 (500-225445-6), Duplicate (500-225445-7), (LCS 160-590934/2-A), (MB 160-590934/1-A), (240-176540-N-2-B), (240-176540-M-2-B MS) and (240-176540-J-2-B MSD)

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

Method Summary

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

Job ID: 500-225445-2

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

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- 14

Sample Summary

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

Job ID: 500-225445-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-225445-1	MW-05	Water	11/14/22 13:31	11/15/22 10:00
500-225445-2	MW-02	Water	11/14/22 14:26	11/15/22 10:00
500-225445-3	MW-03	Water	11/14/22 15:15	11/15/22 10:00
500-225445-4	MW-04	Water	11/14/22 16:25	11/15/22 10:00
500-225445-5	MW-01	Water	11/15/22 09:56	11/16/22 10:30
500-225445-6	MW-10	Water	11/15/22 11:21	11/16/22 10:30
500-225445-7	Duplicate	Water	11/15/22 00:00	11/16/22 10:30

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- 2
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Client Sample Results

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

Job ID: 500-225445-2

Client Sample ID: MW-05

Lab Sample ID: 500-225445-1

Date Collected: 11/14/22 13:31

Matrix: Water

Date Received: 11/15/22 10:00

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	-0.0419	U	0.103	0.103	1.00	0.227	pCi/L	11/22/22 13:16	12/14/22 08:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		40 - 110					11/22/22 13:16	12/14/22 08:16	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	0.324	U	0.352	0.353	1.00	0.573	pCi/L	11/22/22 13:55	12/12/22 11:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		40 - 110					11/22/22 13:55	12/12/22 11:44	1
Y Carrier	73.6		40 - 110					11/22/22 13:55	12/12/22 11:44	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	0.282	U	0.367	0.368	5.00	0.573	pCi/L		12/15/22 17:35	1

Client Sample Results

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

Job ID: 500-225445-2

Client Sample ID: MW-02
Date Collected: 11/14/22 14:26
Date Received: 11/15/22 10:00

Lab Sample ID: 500-225445-2
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	0.0733	U	0.128	0.128	1.00	0.224	pCi/L	11/22/22 13:16	12/14/22 08:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.4		40 - 110					11/22/22 13:16	12/14/22 08:16	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	0.485	U	0.383	0.385	1.00	0.587	pCi/L	11/22/22 13:55	12/12/22 11:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.4		40 - 110					11/22/22 13:55	12/12/22 11:43	1
Y Carrier	72.5		40 - 110					11/22/22 13:55	12/12/22 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	0.559	U	0.404	0.406	5.00	0.587	pCi/L		12/15/22 17:35	1

Client Sample Results

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

Job ID: 500-225445-2

Client Sample ID: MW-03
Date Collected: 11/14/22 15:15
Date Received: 11/15/22 10:00

Lab Sample ID: 500-225445-3
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	0.0451	U	0.113	0.113	1.00	0.209	pCi/L	11/22/22 13:16	12/14/22 08:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.5		40 - 110					11/22/22 13:16	12/14/22 08:16	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	0.368	U	0.342	0.344	1.00	0.540	pCi/L	11/22/22 13:55	12/12/22 11:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.5		40 - 110					11/22/22 13:55	12/12/22 11:43	1
Y Carrier	72.5		40 - 110					11/22/22 13:55	12/12/22 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	0.413	U	0.360	0.362	5.00	0.540	pCi/L		12/15/22 17:35	1

Client Sample Results

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

Job ID: 500-225445-2

Client Sample ID: MW-04

Lab Sample ID: 500-225445-4

Date Collected: 11/14/22 16:25

Matrix: Water

Date Received: 11/15/22 10:00

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	0.0271	U	0.116	0.117	1.00	0.222	pCi/L	11/22/22 13:16	12/14/22 08:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					11/22/22 13:16	12/14/22 08:16	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	0.258	U	0.348	0.349	1.00	0.583	pCi/L	11/22/22 13:55	12/12/22 11:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					11/22/22 13:55	12/12/22 11:43	1
Y Carrier	71.8		40 - 110					11/22/22 13:55	12/12/22 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	0.285	U	0.367	0.368	5.00	0.583	pCi/L		12/15/22 17:35	1

Client Sample Results

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

Job ID: 500-225445-2

Client Sample ID: MW-01

Lab Sample ID: 500-225445-5

Date Collected: 11/15/22 09:56

Matrix: Water

Date Received: 11/16/22 10:30

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0706	U	0.106	0.107	1.00	0.183	pCi/L	11/22/22 13:16	12/14/22 08:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.2		40 - 110					11/22/22 13:16	12/14/22 08:16	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	0.589		0.383	0.387	1.00	0.566	pCi/L	11/22/22 13:55	12/12/22 11:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.2		40 - 110					11/22/22 13:55	12/12/22 11:29	1
Y Carrier	72.5		40 - 110					11/22/22 13:55	12/12/22 11:29	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	0.659		0.397	0.402	5.00	0.566	pCi/L		12/15/22 17:35	1

Client Sample Results

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

Job ID: 500-225445-2

Client Sample ID: MW-10
Date Collected: 11/15/22 11:21
Date Received: 11/16/22 10:30

Lab Sample ID: 500-225445-6
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	0.150	U	0.146	0.147	1.00	0.230	pCi/L	11/22/22 13:16	12/14/22 08:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110					11/22/22 13:16	12/14/22 08:16	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	0.759		0.379	0.385	1.00	0.501	pCi/L	11/22/22 13:55	12/12/22 11:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110					11/22/22 13:55	12/12/22 11:29	1
Y Carrier	70.3		40 - 110					11/22/22 13:55	12/12/22 11:29	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	0.909		0.406	0.412	5.00	0.501	pCi/L		12/15/22 17:35	1

Client Sample Results

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

Job ID: 500-225445-2

Client Sample ID: Duplicate
Date Collected: 11/15/22 00:00
Date Received: 11/16/22 10:30

Lab Sample ID: 500-225445-7
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	0.403		0.177	0.181	1.00	0.214	pCi/L	11/22/22 13:16	12/14/22 08:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					11/22/22 13:16	12/14/22 08:17	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	0.776		0.390	0.396	1.00	0.540	pCi/L	11/22/22 13:55	12/12/22 11:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					11/22/22 13:55	12/12/22 11:30	1
Y Carrier	78.9		40 - 110					11/22/22 13:55	12/12/22 11:30	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	1.18		0.428	0.435	5.00	0.540	pCi/L		12/15/22 17:35	1

Definitions/Glossary

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

Job ID: 500-225445-2

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

Job ID: 500-225445-2

Rad

Prep Batch: 590929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-225445-1	MW-05	Total/NA	Water	PrecSep-21	
500-225445-2	MW-02	Total/NA	Water	PrecSep-21	
500-225445-3	MW-03	Total/NA	Water	PrecSep-21	
500-225445-4	MW-04	Total/NA	Water	PrecSep-21	
500-225445-5	MW-01	Total/NA	Water	PrecSep-21	
500-225445-6	MW-10	Total/NA	Water	PrecSep-21	
500-225445-7	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-590929/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-590929/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 590934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-225445-1	MW-05	Total/NA	Water	PrecSep_0	
500-225445-2	MW-02	Total/NA	Water	PrecSep_0	
500-225445-3	MW-03	Total/NA	Water	PrecSep_0	
500-225445-4	MW-04	Total/NA	Water	PrecSep_0	
500-225445-5	MW-01	Total/NA	Water	PrecSep_0	
500-225445-6	MW-10	Total/NA	Water	PrecSep_0	
500-225445-7	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-590934/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-590934/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

QC Sample Results

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

Job ID: 500-225445-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-590929/1-A
Matrix: Water
Analysis Batch: 593574

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 590929

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.008010	U	0.112	0.112	1.00	0.221	pCi/L	11/22/22 13:16	12/14/22 08:10	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	95.4		40 - 110		11/22/22 13:16	12/14/22 08:10	1			

Lab Sample ID: LCS 160-590929/2-A
Matrix: Water
Analysis Batch: 593574

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 590929

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	9.781		1.16	1.00	0.238	pCi/L	86	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	90.5		40 - 110						

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-590934/1-A
Matrix: Water
Analysis Batch: 593164

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 590934

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.4351	U	0.323	0.326	1.00	0.488	pCi/L	11/22/22 13:55	12/12/22 11:29	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	95.4		40 - 110		11/22/22 13:55	12/12/22 11:29	1			
Y Carrier	75.5		40 - 110		11/22/22 13:55	12/12/22 11:29	1			

Lab Sample ID: LCS 160-590934/2-A
Matrix: Water
Analysis Batch: 593259

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 590934

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	8.37	11.69		1.54	1.00	0.516	pCi/L	140	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	90.5		40 - 110						
Y Carrier	75.1		40 - 110						

Eurofins Chicago

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

Chain of Custody Record



Environment Test ng

Client Information		Sampler: <i>Kaelyn Sperle</i>	Lab PM: Mockler Diana J	Carrier Tracking No(s):	COC No. 500-106664-44025 1
Client Contact: Mitchel Dolan		Phone: <i>262-278-1621</i>	E-Mail: Diana.Mockler@et.eurofins.com	State of Origin: <i>IL</i>	Page Page 1 of 1
Company: KPRG and Associates Inc		PWSID			Job #: <i>500-225445</i>
Address: 14665 West Lisbon Road Suite 1A		Due Date Requested: <i>Standard</i>	Analysis Requested		
City: Brookfield		TAT Requested (days): <i>Standard</i>	Preservation Codes		
State Zip: WI 53005		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No	A HCL M Hexane		
Phone: 262-781-0475(Tel)		PO #: 4502081030	B NaOH N None		
Email: mitcheld@kprginc.com		WO #:	C Zn Acetate O AsNaO2		
Project Name: Powerton CCR		Project #: 50011612	D Nitric Acid P Na2O4S		
Site: Illinois		SSOW#:	E NaHSO4 R Na2SO3		
			F MeOH S H2SO4		
			G Amchlor T TSP Dodecahydrate		
			H Ascorbic Acid U Acetone		
			I Ice V MCAA		
			J DI Water W pH 4-5		
			K EDTA Y Trizma		
			L EDA Z other (specify)		
			Other:		

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 MS/MSD (Yes or No)	903.0 - Standard Target List	Ra226Ra228_GFPCC - Local Method	904.0 - Standard Target List	6020A, 7470A	2540C 4500_F_C SM4500_SO4_E	Total Number of Containers	Special Instructions/Note
							D	D	D	D	N		
1 2 3 4 MW-05	11/14/22	1331	G	Water	N	N	X	X	X	X	X		
MW-02	11/14/22	1426	G	Water	N	N	X	X	X	X	X		
MW-03	11/14/22	1515	G	Water	N	N	X	X	X	X	X		
MW-04	11/14/22	1625	G	Water	N	N	X	X	X	X	X		
				Water									
				Water									
				Water									
				Water									

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

Empty Kit Relinquished by	Date	Time	Method of Shipment:
Relinquished by: <i>Kaelyn Sperle</i>	Date/Time: 11/14/22/1830	Company: KPRG	Received by: <i>Shirley Booth</i>
Relinquished by:	Date/Time:	Company:	Date/Time: 11/15/22 1000
Relinquished by:	Date/Time:	Company:	Company: <i>FEDEX</i>

Custody Seals Intact. <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks. <i>1.0 - 70.5</i>
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ORIGIN ID:PIAA (262) 278-1621
KAELYN SPERLE
KPRG AND ASSOCIATES
414 PLAZA DR STE 106

SHIP DATE: 14NOV22
ACTWGT: 45.85 LB
CAD: 6994780/SSFE2341
DIMS: 24x15x15 IN

WESTMONT, IL 60559
UNITED STATES US

BILL THIRD PARTY

TO: EUROFINS CHICAGO
EUROFINS CHICAGO
2417 BOND ST



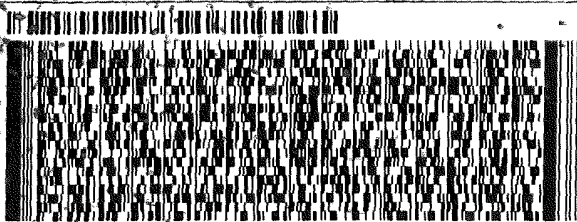
UNIVERSITY PARK IL 60484

500-225445 Waybi

(708) 634-6200

REF:

INV: DEPT



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REL#
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TRK# 3906 3666 0657
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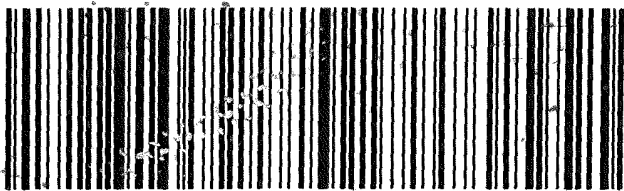
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PRIORITY OVERNIGHT

AHS

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IL-US ORD



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Part # 158297-435 RP

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

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 15NOV22
ACTWGT: 48.45 LB
CAD: 6994780/SSFE2341
DIMS: 24x13x14 IN

BILL THIRD PARTY

TO EUROFINs CHICAGO
EUROFINs CHICAGO
2417 BOND ST



UNIVERSITY PARK IL 60484

(708) 634-6200

REF:

500-225445 Waybl

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PO:

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Mstr# 3906 9224 8909

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PRIORITY OVERNIGHT

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IL-US ORD

XN JOTA



Part # 156297-435 PR05 FXR 06/23
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Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Mockler, Diana J	Lab Tracking No(s): 500-167506-1
Shipping/Receiving		E-Mail: Diana.Mockler@et.eurofins.com	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		State of Origin: Illinois	
Address: 13715 Rider Trail North,		Job #: 500-225445-1	
City: Earth City		Preservation Codes:	
State, Zip: MO, 63045		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)	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		Other:	
Email:			
Project Name: Powerton CCR			
Site: MWG - Powerton			
Due Date Requested: 12/17/2022			
TAT Requested (days):			
PO #:			
WO #:			
Project #:			
50011612			
SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=on-site, BT=tissue, A=air)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	90.0/PrecSep_21 Standard Target List	90.0/PrecSep_0 Standard Target List	Raz26Raz28_GFC	Total Number of Containers	Special Instructions/Note:
MW-02 (500-225445-2)	11/14/22	14:26 Central		Water		X	X	X	X		3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-03 (500-225445-3)	11/14/22	15:15 Central		Water		X	X	X	X		3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-04 (500-225445-4)	11/14/22	16:25 Central		Water		X	X	X	X		3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no

Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/mainx 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		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Unconfirmed		Special Instructions/QC Requirements:	
Deliverable Requested: I, II, III, IV, Other (specify)		Primary Deliverable Rank: 2	
Empty Kit Relinquished by:		Date:	
Relinquished by: <i>Melissa Campbell</i>		Date/Time: 11/15/22 1600	
Relinquished by: <i>Melissa Campbell</i>		Date/Time: 11/15/22 1600	
Relinquished by:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:	
Cooler Temperature(s) °C and Other Remarks:		Received by: <i>FEDEX</i>	
Company: <i>FEDEX</i>		Date/Time: 11/15/22 1600	
Company: <i>FEDEX</i>		Date/Time: 11/15/22 1600	
Company: <i>FEDEX</i>		Date/Time: 11/15/22 1600	



Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler: Mockler, Diana J		Lab PM: Mockler, Diana J		Carrier Tracking No(s): 500-167592.1		COC No: 500-167592.1	
Client Contact: Shipping/Receiving		Phone: Diana Mockler@et.eurofins.com		E-Mail: Diana Mockler@et.eurofins.com		State of Origin: Illinois		Page: Page 1 of 1	
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-225445-2		Preservation Codes:		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)	
Address: 13715 Rider Trail North,		Due Date Requested: 12/19/2022		TAT Requested (days):		PO #:		WO #:	
City: Earth City		State, Zip: MO, 63045		Project #: 50011612		Project Name: Powertron CCR		Site: MWG - Powertron	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		Matrix (Water, Solid, On-water, BT, Tissue, A, etc)		Sample Type (C=comp, G=grab)		Sample Time		Sample Date	
Email:		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (Water, Solid, On-water, BT, Tissue, A, etc)	
Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		903.0/PreSep_21 Standard Target List		904.0/PreSep_0 Standard Target List		Ra226Ra228 GFCP	
Total Number of Containers		Special Instructions/Note:		Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no		Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no		Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no	
MW-01 (500-225445-5)		11/15/22		09:56 Central		Water		X X X	
MW-10 (500-225445-6)		11/15/22		11:21 Central		Water		X X X	
Duplicate (500-225445-7)		11/15/22		Central		Water		X X X	

Analysis Requested

Special Instructions/Note:

Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no

Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no

Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no

Possible Hazard Identification

Unconfirmed

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

Empty Kit Relinquished by: _____ Date: _____

Relinquished by: *Ashley Carberry* Date/Time: 11/16/22 1600 Company: FED EX

Relinquished by: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: _____ Custody Seal No.: _____

Δ Yes Δ No

Received by: *Sonia Worthington* Date/Time: NOV 17 2022 0910 Company: GMSH

Received by: _____ Date/Time: _____ Company: _____

Special Instructions/QC Requirements: _____

Return To Client Disposal By Lab Archive For _____ Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Method of Shipment: _____

Time: _____

Cooler Temperature(s) °C and Other Remarks:



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-225445-2

Login Number: 225445

List Number: 1

Creator: Scott, Sherri L

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.5,-0.9 samples not frozen
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-225445-2

Login Number: 225445

List Number: 2

Creator: Worthington, Sierra M

List Source: Eurofins St. Louis

List Creation: 11/16/22 11:13 AM

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

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-225445-2

Login Number: 225445

List Number: 3

Creator: Worthington, Sierra M

List Source: Eurofins St. Louis

List Creation: 11/17/22 10:33 AM

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

Lab Chronicle

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

Job ID: 500-225445-2

Client Sample ID: MW-05
Date Collected: 11/14/22 13:31
Date Received: 11/15/22 10:00

Lab Sample ID: 500-225445-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			590929	DJP	EET SL	11/22/22 13:16
Total/NA	Analysis	903.0		1	593573	FLC	EET SL	12/14/22 08:16
Total/NA	Prep	PrecSep_0			590934	DJP	EET SL	11/22/22 13:55
Total/NA	Analysis	904.0		1	593269	FLC	EET SL	12/12/22 11:44
Total/NA	Analysis	Ra226_Ra228		1	593807	CLP	EET SL	12/15/22 17:35

Client Sample ID: MW-02
Date Collected: 11/14/22 14:26
Date Received: 11/15/22 10:00

Lab Sample ID: 500-225445-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			590929	DJP	EET SL	11/22/22 13:16
Total/NA	Analysis	903.0		1	593573	FLC	EET SL	12/14/22 08:16
Total/NA	Prep	PrecSep_0			590934	DJP	EET SL	11/22/22 13:55
Total/NA	Analysis	904.0		1	593269	FLC	EET SL	12/12/22 11:43
Total/NA	Analysis	Ra226_Ra228		1	593807	CLP	EET SL	12/15/22 17:35

Client Sample ID: MW-03
Date Collected: 11/14/22 15:15
Date Received: 11/15/22 10:00

Lab Sample ID: 500-225445-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			590929	DJP	EET SL	11/22/22 13:16
Total/NA	Analysis	903.0		1	593573	FLC	EET SL	12/14/22 08:16
Total/NA	Prep	PrecSep_0			590934	DJP	EET SL	11/22/22 13:55
Total/NA	Analysis	904.0		1	593269	FLC	EET SL	12/12/22 11:43
Total/NA	Analysis	Ra226_Ra228		1	593807	CLP	EET SL	12/15/22 17:35

Client Sample ID: MW-04
Date Collected: 11/14/22 16:25
Date Received: 11/15/22 10:00

Lab Sample ID: 500-225445-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			590929	DJP	EET SL	11/22/22 13:16
Total/NA	Analysis	903.0		1	593573	FLC	EET SL	12/14/22 08:16
Total/NA	Prep	PrecSep_0			590934	DJP	EET SL	11/22/22 13:55
Total/NA	Analysis	904.0		1	593269	FLC	EET SL	12/12/22 11:43
Total/NA	Analysis	Ra226_Ra228		1	593807	CLP	EET SL	12/15/22 17:35

Lab Chronicle

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

Job ID: 500-225445-2

Client Sample ID: MW-01
Date Collected: 11/15/22 09:56
Date Received: 11/16/22 10:30

Lab Sample ID: 500-225445-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			590929	DJP	EET SL	11/22/22 13:16
Total/NA	Analysis	903.0		1	593573	FLC	EET SL	12/14/22 08:16
Total/NA	Prep	PrecSep_0			590934	DJP	EET SL	11/22/22 13:55
Total/NA	Analysis	904.0		1	593164	FLC	EET SL	12/12/22 11:29
Total/NA	Analysis	Ra226_Ra228		1	593807	CLP	EET SL	12/15/22 17:35

Client Sample ID: MW-10
Date Collected: 11/15/22 11:21
Date Received: 11/16/22 10:30

Lab Sample ID: 500-225445-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			590929	DJP	EET SL	11/22/22 13:16
Total/NA	Analysis	903.0		1	593573	FLC	EET SL	12/14/22 08:16
Total/NA	Prep	PrecSep_0			590934	DJP	EET SL	11/22/22 13:55
Total/NA	Analysis	904.0		1	593164	FLC	EET SL	12/12/22 11:29
Total/NA	Analysis	Ra226_Ra228		1	593807	CLP	EET SL	12/15/22 17:35

Client Sample ID: Duplicate
Date Collected: 11/15/22 00:00
Date Received: 11/16/22 10:30

Lab Sample ID: 500-225445-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			590929	DJP	EET SL	11/22/22 13:16
Total/NA	Analysis	903.0		1	593573	FLC	EET SL	12/14/22 08:17
Total/NA	Prep	PrecSep_0			590934	DJP	EET SL	11/22/22 13:55
Total/NA	Analysis	904.0		1	593164	FLC	EET SL	12/12/22 11:30
Total/NA	Analysis	Ra226_Ra228		1	593807	CLP	EET SL	12/15/22 17:35

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

Job ID: 500-225445-2

Laboratory: Eurofins St. Louis

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

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

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

Tracer/Carrier Summary

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

Job ID: 500-225445-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (40-110)
500-225445-1	MW-05	91.5
500-225445-2	MW-02	87.4
500-225445-3	MW-03	90.5
500-225445-4	MW-04	90.0
500-225445-5	MW-01	92.2
500-225445-6	MW-10	91.7
500-225445-7	Duplicate	94.4
LCS 160-590929/2-A	Lab Control Sample	90.5
MB 160-590929/1-A	Method Blank	95.4

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (40-110)	Y (40-110)
500-225445-1	MW-05	91.5	73.6
500-225445-2	MW-02	87.4	72.5
500-225445-3	MW-03	90.5	72.5
500-225445-4	MW-04	90.0	71.8
500-225445-5	MW-01	92.2	72.5
500-225445-6	MW-10	91.7	70.3
500-225445-7	Duplicate	94.4	78.9
LCS 160-590934/2-A	Lab Control Sample	90.5	75.1
MB 160-590934/1-A	Method Blank	95.4	75.5

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier