



ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

**FEDERAL CCR COMPLIANCE
ANNUAL GROUNDWATER MONITORING and
CORRECTIVE ACTION REPORT - 2023
FORMER ASH BASIN**

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

Prepared By: **KPRG and Associates, Inc.
14665 West Lisbon Road, Suite 1A
Brookfield, WI 53005**

January 31, 2024

TABLE OF CONTENTS

OVERVIEW 1

1.0 INTRODUCTION 3

2.0 FIELD PROCEDURES AND GROUNDWATER FLOW EVALUATION 4

 2.1 Field Procedures 4

 2.2 Groundwater Flow Evaluation 4

3.0 ANALYTICAL DATA AND STATUS OF EVALUATIONS 6

 3.1 Sampling Summary 6

 3.2 Data Summary 6

 3.3 Current Status 6

4.0 SUMMARY/CONCLUSIONS AND RECOMMENDATIONS 7

5.0 REFERENCES 8

FIGURE

1 – CCR Monitoring Wells Site Map

TABLES

- 1 – Groundwater Elevations
- 2 – Groundwater Flow Direction and Estimated Seepage Velocity/Flow Rate for FAB
- 3 – CCR Groundwater Sample Collection Summary for 2023
- 4 – FAB Appendix III Groundwater Analytical Results through 2023
- 5 – FAB Appendix IV Groundwater Analytical Results through 2023

ATTACHMENTS

- 1 – Groundwater Flow Contour Maps
- 2 – Analytical Data Packages

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 2023 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 (1st, 3rd, and 4th quarters), sulfate (4th quarter), total dissolved solids (TDS) (1st and 4th quarters)
 - MW-03 – boron (1st and 4th quarters), chloride (2nd and 3rd quarters)
 - MW-04 – boron (3rd and 4th quarters), chloride and TDS (3rd quarter), fluoride (2nd quarter), sulfate (2nd and 3rd quarters)
 - MW-05 – boron (2nd through 4th quarters), chloride, fluoride, and TDS (1st through 4th quarters), sulfate (1st, 2nd, and 4th quarters)
 - MW-10 (upgradient) – boron (1st through 4th quarters), fluoride (2nd through 4th quarters), sulfate (4th quarter), TDS (2nd and 4th quarters)

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, completing another ASD for any Appendix III parameters not included in the initial evaluation is not appropriate. As discussed further below, there were no verified

Appendix IV parameter detections above established site-specific Groundwater Protection Standards (GWPSs).

- Section 257.90(e)(6)(iv) – In 2023 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. It is noted that in 3rd quarter sampling, wells MW-02 and MW-03 had detections of thallium at 0.003 ug/l, however thallium was historically not detected in any of the wells including MW-02 and MW-03 and subsequent sampling also showed no detections of thallium at these locations. These are not considered verified detections as discussed in Section 3.2 below.
- 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 2023. It does not duplicate information or activities previously reported for 2022. 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. This table has been modified to include Illinois River water levels from the U.S. Geological Survey (USGS) Kingston Mine gage which is the nearest river gaging station to the site for each well gaging event. A review of water levels associated with the 2023 quarterly groundwater sampling events (February, May, August and November), shows that river water levels were slightly higher in elevation than those measured at downgradient monitoring wells MW-03 (February) and MW-04 (February, August and November). These are the two wells closest to the river. Based on this observation, it is noted that the water chemistry data from those wells, for those sampling events, may be skewed either lower or higher depending on the river water quality that may have mixed with groundwater in the vicinity of those wells. There were no instances in the current year or during any of the previous rounds of water level monitoring included on Table 1 where the river water level was above that recorded in the two upgradient monitoring wells (MW-01 and MW-10).

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 2023 relative to the site are provided in Attachment 1.

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)

The hydraulic conductivity for the sandy unit used in Table 2 was based on a re-evaluation of slug test data performed by Patrick Engineering as part of a hydrogeologic assessment dated February 2011. The estimated effective porosity of the sandy materials (0.35) was obtained from literature (Applied Hydrogeology, Fetter, 1980).

3.0 ANALYTICAL DATA AND STATUS OF EVALUATIONS

3.1 Sampling Summary

The groundwater sampling summary from 2023 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 Attachment 2.

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. Based on the groundwater elevation discussion above, it is noted that the water chemistry data from wells MW-03 (1st quarter) and MW-04 (1st, 3rd and 4th quarters) may be skewed either lower or higher depending on the river water quality that may have mixed with groundwater in the vicinity of those wells.

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. It is noted that there were two thallium detections during the third quarter 2023 (wells MW-02 and MW-03). One of the detections was qualified by the analytical laboratory to have matrix spike or matrix spike duplicate results outside of acceptable limits. Also, since historically there were no detections of thallium at any of the well locations, including locations MW-02 and MW-03, the Double Quantification Rule as discussed in Section 6.2.2 of the USEPA Statistical Analysis of Groundwater Data at RCRA Facilities Unified Guidance (March 2009) would apply. Since the subsequent round of sampling at these locations again showed no thallium detections, the noted third quarter detections are not considered as verified/confirmed.

3.3 Current Status

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

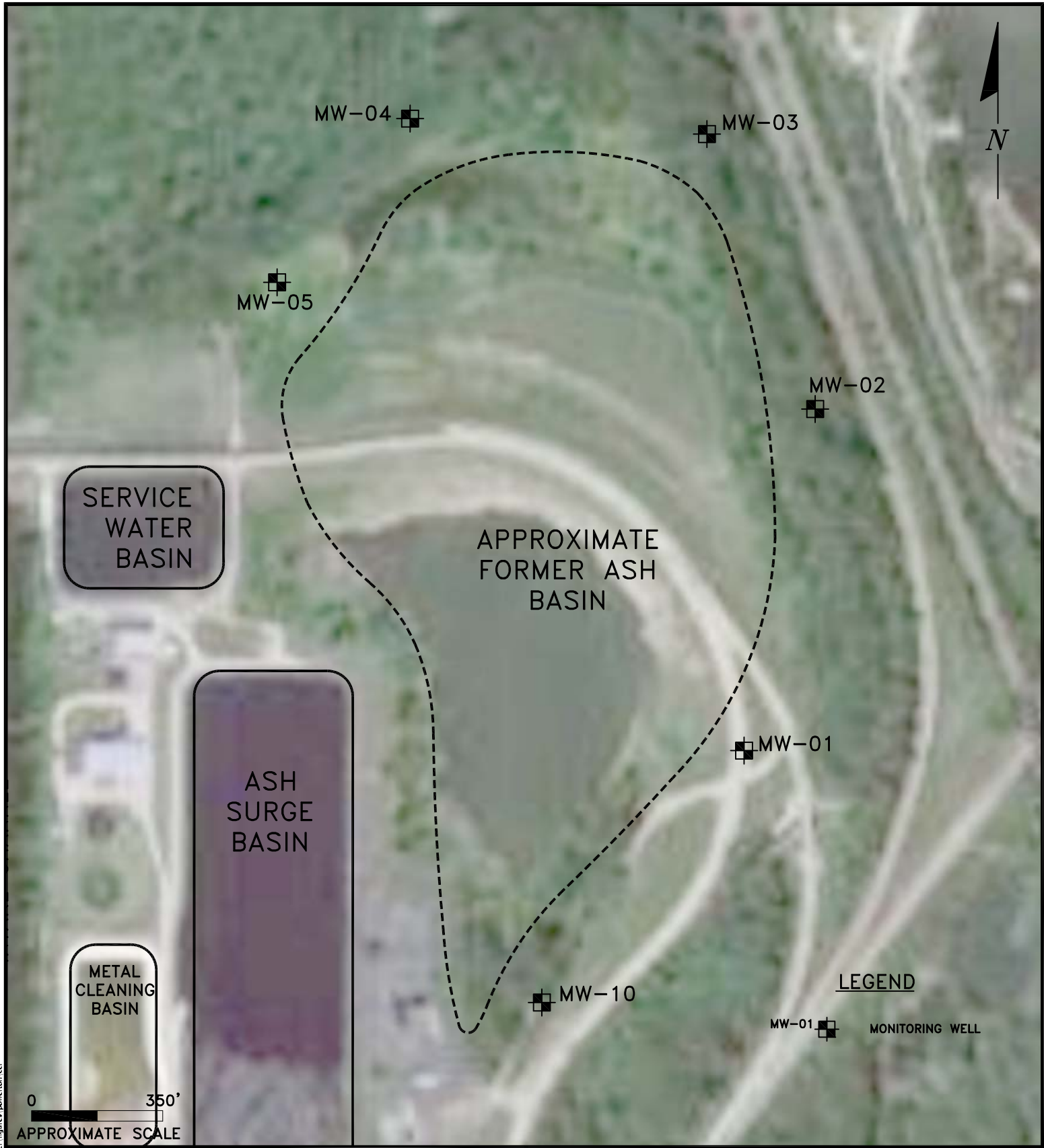
4.0 SUMMARY/CONCLUSIONS AND RECOMMENDATIONS

The assessment monitoring requirements in accordance with the CCR rule are being successfully met. There have been no recorded verified 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 – 2021. January 31, 2022.
- KPRG and Associates, Inc., CCR Compliance Annual Groundwater Monitoring and Corrective Action Report – 2022. January 31, 2023.
- 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.

FIGURE



ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R G

KPRG and Associates, inc.

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

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

FORMER ASH BASIN CCR MONITORING WELL SITE MAP

POWERTON STATION
PEKIN, ILLINOIS

Scale: 1" = 350'

Date: February 10, 2020

KPRG Project No. 12313.1

FIGURE 1

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)	Illinois River Gage Reading* (ft above datum)	Illinois River Gage Reading* (ft above MSL)
MW-01 up-gradient	11/16/2015	465.24	26.04	439.20	4.38	431.55
	2/22/2016	465.24	21.90	443.34	7.97	435.14
	5/16/2016	465.24	21.83	443.41	14.53	441.7
	8/15/2016	465.24	23.89	441.35	7.11	434.28
	11/14/2016	465.24	23.38	441.86	6.35	433.52
	2/13/2017	465.24	21.71	443.53	N/A	N/A
	5/1/2017	465.24	18.87	446.37	17.09	444.26
	6/20/2017	465.24	21.54	443.70	11.93	439.1
	8/25/2017	465.24	24.70	440.54	3.86	431.03
	11/8/2017	465.24	24.92	440.32	6.89	434.06
	5/17/2018	465.24	22.66	442.58	9.93	437.1
	8/8/2018	465.24	26.05	439.19	2.13	429.3
	10/30/2018	465.24	24.69	440.55	4.21	431.38
	2/25/2019	465.24	19.44	445.80	16.74	443.91
	4/29/2019	465.24	20.15	445.09	14.04	441.21
	8/26/2019	465.24	23.85	441.39	3.61	430.78
	2/24/2020	465.24	20.71	444.53	12.84	440.01
	4/27/2020	465.24	20.90	444.34	12.64	439.81
	12/7/2020	465.24	25.69	439.55	2.97	430.14
	2/22/2021	465.24	25.18	440.06	6.21	433.38
	4/7/2021	465.24	22.20	443.04	10.23	437.4
	5/10/2021	465.24	23.41	441.83	10.71	437.88
	6/2/2021	465.24	22.00	443.24	10.7	437.87
	6/28/2021	465.24	23.18	442.06	12.11	439.28
	7/19/2021	465.24	20.43	444.81	15.06	442.23
	8/23/2021	465.24	24.42	440.82	3.49	430.66
	9/30/2021	465.24	26.89	438.35	2.49	429.66
	10/27/2021	465.24	24.53	440.71	13.08	440.25
	11/29/2021	465.24	23.31	441.93	5.17	432.34
	12/30/2021	465.24	24.31	440.93	6.68	433.85
	1/6/2022	465.24	24.86	440.38	6.45	433.62
	2/7/2022	465.24	25.57	439.67	4.4	431.57
	3/1/2022	465.24	21.96	443.28	16.04	443.21
	4/22/2022	465.24	20.03	445.21	N/A	N/A
	5/24/2022	465.24	21.37	443.87	11.42	438.59
	6/6/2022	465.24	22.13	443.11	8.21	435.38
	7/25/2022	465.24	25.48	439.76	5.36	432.53
	8/29/2022	465.24	27.53	437.71	2.55	429.72
	9/28/2022	465.24	28.58	436.66	2.37	429.54
	10/26/2022	465.24	29.75	435.49	4.36	431.53
11/14/2022	465.24	29.58	435.66	3.2	430.37	
12/28/2022	465.24	26.63	438.61	N/A	N/A	
1/24/2023	465.24	27.91	437.33	7.29	434.46	
2/20/2023	465.24	26.94	438.30	7.6	434.77	
3/28/2023	465.24	21.74	443.50	14.9	442.07	
4/25/2023	465.24	22.22	443.02	9.4	436.57	
5/15/2023	465.24	23.91	441.33	8.78	435.95	
6/26/2023	465.24	28.66	436.58	2.42	429.59	
7/25/2023	465.24	28.06	437.18	3.67	430.84	
8/28/2023	465.24	28.85	436.39	3.26	430.43	
9/27/2023	465.24	29.42	435.82	3.35	430.52	
10/27/2023	465.24	29.16	436.08	3.98	431.15	
11/6/2023	465.24	29.23	436.01	3.65	430.82	
12/21/2023	465.24	29.21	436.03	6.12	433.29	

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)	Illinois River Gage Reading* (ft above datum)	Illinois River Gage Reading* (ft above MSL)
MW-02 down-gradient	6/20/2017	462.60	22.04	440.56	11.93	439.1
	8/23/2017	462.60	28.42	434.18	3.86	431.03
	11/7/2017	462.60	26.08	436.52	6.89	434.06
	5/17/2018	462.60	23.26	439.34	9.93	437.1
	8/7/2018	462.60	29.70	432.90	2.13	429.3
	10/30/2018	462.60	26.77	435.83	4.21	431.38
	2/25/2019	462.60	17.02	445.58	16.74	443.91
	4/29/2019	462.60	19.26	443.34	14.04	441.21
	8/26/2019	462.60	27.45	435.15	3.61	430.78
	2/24/2020	462.60	20.35	442.25	12.84	440.01
	4/27/2020	462.60	20.51	442.09	12.64	439.81
	12/7/2020	462.60	28.71	433.89	2.97	430.14
	2/22/2021	462.60	25.90	436.70	6.21	433.38
	4/7/2021	462.60	21.95	440.65	10.23	437.4
	5/10/2021	462.60	23.01	439.59	10.71	437.88
	6/2/2021	462.60	21.74	440.86	10.7	437.87
	6/28/2021	462.60	22.24	440.36	12.11	439.28
	7/19/2021	462.60	18.66	443.94	15.06	442.23
	8/23/2021	462.60	27.95	434.65	3.49	430.66
	9/30/2021	462.60	30.44	432.16	2.49	429.66
	10/27/2021	462.60	22.74	439.86	13.08	440.25
	11/29/2021	462.60	25.57	437.03	5.17	432.34
	12/30/2021	462.60	25.11	437.49	6.68	433.85
	1/6/2022	462.60	24.96	437.64	6.45	433.62
	2/7/2022	462.60	27.47	435.13	4.4	431.57
	3/1/2022	462.60	18.06	444.54	16.04	443.21
	4/22/2022	462.60	18.63	443.97	N/A	N/A
	5/24/2022	462.60	21.44	441.16	11.42	438.59
	6/6/2022	462.60	21.14	441.46	8.21	435.38
	7/25/2022	462.60	29.28	433.32	5.36	432.53
	8/29/2022	462.60	30.28	432.32	2.55	429.72
	9/28/2022	462.60	31.81	430.79	2.37	429.54
	10/26/2022	462.60	32.84	429.76	4.36	431.53
	11/14/2022	462.60	32.03	430.57	3.2	430.37
	12/28/2022	462.60	29.35	433.25	N/A	N/A
	1/24/2023	462.60	28.25	434.35	7.29	434.46
	2/20/2023	462.60	27.12	435.48	7.6	434.77
	3/28/2023	462.60	19.46	443.14	14.9	442.07
	4/25/2023	462.60	22.50	440.10	9.4	436.57
	5/15/2023	462.60	24.26	438.34	8.78	435.95
6/26/2023	462.60	31.12	431.48	2.42	429.59	
7/25/2023	462.60	30.16	432.44	3.67	430.84	
8/28/2023	462.60	31.25	431.35	3.26	430.43	
9/27/2023	462.60	31.46	431.14	3.35	430.52	
10/27/2023	462.60	30.02	432.58	3.98	431.15	
11/6/2023	462.60	30.52	432.08	3.65	430.82	
12/21/2023	462.60	30.44	432.16	6.12	433.29	

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)	Illinois River Gage Reading* (ft above datum)	Illinois River Gage Reading* (ft above MSL)
MW-03 down- gradient	6/20/2017	462.48	22.31	440.17	11.93	439.1
	8/23/2017	462.48	28.18	434.30	3.86	431.03
	11/7/2017	462.48	25.38	437.10	6.89	434.06
	5/17/2018	462.48	22.62	439.86	9.93	437.1
	8/7/2018	462.48	29.17	433.31	2.13	429.3
	10/30/2018	462.48	24.71	437.77	4.21	431.38
	2/25/2019	462.48	17.20	445.28	16.74	443.91
	4/29/2019	462.48	18.85	443.63	14.04	441.21
	8/26/2019	462.48	27.65	434.83	3.61	430.78
	2/24/2020	462.48	20.18	442.30	12.84	440.01
	4/27/2020	462.48	20.43	442.05	12.64	439.81
	12/7/2020	462.48	28.61	433.87	2.97	430.14
	2/22/2021	462.48	23.48	439.00	6.21	433.38
	4/7/2021	462.48	21.73	440.75	10.23	437.4
	5/10/2021	462.48	22.98	439.50	10.71	437.88
	6/2/2021	462.48	21.53	440.95	10.7	437.87
	6/28/2021	462.48	21.98	440.50	12.11	439.28
	7/19/2021	462.48	18.35	444.13	15.06	442.23
	8/23/2021	462.48	27.85	434.63	3.49	430.66
	9/30/2021	462.48	30.32	432.16	2.49	429.66
	10/27/2021	462.48	22.34	440.14	13.08	440.25
	11/29/2021	462.48	22.86	439.62	5.17	432.34
	12/30/2021	462.48	23.14	439.34	6.68	433.85
	1/6/2022	462.48	23.13	439.34	6.45	433.62
	2/7/2022	462.48	24.08	438.40	4.4	431.57
	3/1/2022	462.48	18.92	443.56	16.04	443.21
	4/22/2022	462.48	17.98	444.50	N/A	N/A
	5/24/2022	462.48	21.14	441.34	11.42	438.59
	6/6/2022	462.48	22.50	439.98	8.21	435.38
	7/25/2022	462.48	29.11	433.37	5.36	432.53
	8/29/2022	462.48	30.31	432.17	2.55	429.72
	9/28/2022	462.48	32.27	430.21	2.37	429.54
	10/26/2022	462.48	33.83	428.65	4.36	431.53
	11/14/2022	462.48	33.51	428.97	3.2	430.37
	12/28/2022	462.48	30.21	432.27	N/A	N/A
	1/24/2023	462.48	30.19	432.29	7.29	434.46
	2/20/2023	462.48	28.45	434.03	7.6	434.77
	3/28/2023	462.48	19.55	442.93	14.9	442.07
	4/25/2023	462.48	22.15	440.33	9.4	436.57
	5/15/2023	462.48	23.46	439.02	8.78	435.95
6/26/2023	462.48	31.47	431.01	2.42	429.59	
7/25/2023	462.48	30.42	432.06	3.67	430.84	
8/28/2023	462.48	31.29	431.19	3.26	430.43	
9/27/2023	462.48	32.32	430.16	3.35	430.52	
10/27/2023	462.48	31.72	430.76	3.98	431.15	
11/6/2023	462.48	31.45	431.03	3.65	430.82	
12/21/2023	462.48	31.50	430.98	6.12	433.29	

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)	Illinois River Gage Reading* (ft above datum)	Illinois River Gage Reading* (ft above MSL)
MW-04 down-gradient	6/20/2017	460.57	22.15	438.42	11.93	439.1
	8/28/2017	460.57	28.49	432.08	3.86	431.03
	11/7/2017	460.57	25.62	434.95	6.89	434.06
	5/17/2018	460.57	24.13	436.44	9.93	437.1
	8/7/2018	460.57	29.23	431.34	2.13	429.3
	10/30/2018	460.57	26.58	433.99	4.21	431.38
	2/25/2019	460.57	15.45	445.12	16.74	443.91
	4/29/2019	460.57	15.88	444.69	14.04	441.21
	8/26/2019	460.57	27.35	433.22	3.61	430.78
	2/24/2020	460.57	19.81	440.76	12.84	440.01
	4/27/2020	460.57	19.76	440.81	12.64	439.81
	12/7/2020	460.57	28.50	432.07	2.97	430.14
	2/22/2021	460.57	26.44	434.13	6.21	433.38
	4/7/2021	460.57	21.90	438.67	10.23	437.4
	5/10/2021	460.57	23.92	436.65	10.71	437.88
	6/2/2021	460.57	21.41	439.16	10.7	437.87
	6/28/2021	460.57	22.40	438.17	12.11	439.28
	7/19/2021	460.57	17.22	443.35	15.06	442.23
	8/23/2021	460.57	27.81	432.76	3.49	430.66
	9/30/2021	460.57	30.01	430.56	2.49	429.66
	10/27/2021	460.57	22.29	438.28	13.08	440.25
	11/29/2021	460.57	25.83	434.74	5.17	432.34
	12/30/2021	460.57	25.79	434.78	6.68	433.85
	1/6/2022	460.57	25.30	435.27	6.45	433.62
	2/7/2022	460.57	27.95	432.62	4.4	431.57
	3/1/2022	460.57	16.63	443.94	16.04	443.21
	4/22/2022	460.57	16.81	443.76	N/A	N/A
	5/24/2022	460.57	20.89	439.68	11.42	438.59
	6/6/2022	460.57	22.89	437.68	8.21	435.38
	7/25/2022	460.57	29.18	431.39	5.36	432.53
	8/29/2022	460.57	29.71	430.86	2.55	429.72
	9/28/2022	460.57	31.42	429.15	2.37	429.54
	10/26/2022	460.57	32.38	428.19	4.36	431.53
	11/14/2022	460.57	32.80	427.77	3.2	430.37
	12/28/2022	460.57	29.21	431.36	N/A	N/A
	1/24/2023	460.57	27.79	432.78	7.29	434.46
	2/20/2023	460.57	26.46	434.11	7.6	434.77
	3/28/2023	460.57	17.49	443.08	14.9	442.07
	4/25/2023	460.57	22.01	438.56	9.4	436.57
	5/15/2023	460.57	24.29	436.28	8.78	435.95
6/26/2023	460.57	30.13	430.44	2.42	429.59	
7/25/2023	460.57	29.88	430.69	3.67	430.84	
8/28/2023	460.57	30.60	429.97	3.26	430.43	
9/27/2023	460.57	30.90	429.67	3.35	430.52	
10/27/2023	460.57	28.72	431.85	3.98	431.15	
11/6/2023	460.57	29.99	430.58	3.65	430.82	
12/21/2023	460.57	30.02	430.55	6.12	433.29	

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)	Illinois River Gage Reading* (ft above datum)	Illinois River Gage Reading* (ft above MSL)
MW-05 down-gradient	11/16/2015	458.58	26.39	432.19	4.38	431.55
	2/22/2016	458.66	21.12	437.54	7.97	435.14
	5/16/2016	458.66	16.58	442.08	14.53	441.7
	8/15/2016	458.66	23.59	435.07	7.11	434.28
	11/14/2016	458.66	22.72	435.94	6.35	433.52
	2/13/2017	458.66	19.13	439.53	N/A	N/A
	5/1/2017	458.66	13.09	445.57	17.09	444.26
	6/20/2017	458.66	19.43	439.15	11.93	439.1
	8/28/2017	458.66	25.38	433.20	3.86	431.03
	11/7/2017	458.66	22.91	435.67	6.89	434.06
	5/17/2018	458.66	21.54	437.04	9.93	437.1
	8/7/2018	458.66	26.17	432.41	2.13	429.3
	10/30/2018	458.66	23.97	434.61	4.21	431.38
	2/25/2019	458.66	13.21	445.45	16.74	443.91
	4/29/2019	458.66	15.40	443.26	14.04	441.21
	8/26/2019	458.66	24.35	434.31	3.61	430.78
	2/24/2020	458.66	17.25	441.41	12.84	440.01
	4/27/2020	458.66	17.41	441.25	12.64	439.81
	12/7/2020	458.66	25.65	433.01	2.97	430.14
	2/22/2021	458.66	23.82	434.84	6.21	433.38
	4/7/2021	458.66	19.40	439.26	10.23	437.4
	5/10/2021	458.66	21.38	437.28	10.71	437.88
	6/2/2021	458.66	18.99	439.67	10.7	437.87
	6/28/2021	458.66	22.20	436.46	12.11	439.28
	7/19/2021	458.66	14.98	443.68	15.06	442.23
	8/23/2021	458.66	24.85	433.81	3.49	430.66
	9/30/2021	458.66	26.98	431.68	2.49	429.66
	10/27/2021	458.66	20.00	438.66	13.08	440.25
	11/29/2021	458.66	23.13	435.53	5.17	432.34
	12/30/2021	458.66	23.20	435.46	6.68	433.85
	1/6/2022	458.66	22.80	435.86	6.45	433.62
	2/7/2022	458.66	25.22	433.44	4.4	431.57
	3/1/2022	458.66	14.52	444.14	16.04	443.21
	4/22/2022	458.66	14.59	444.07	N/A	N/A
	5/24/2022	458.66	18.32	440.34	11.42	438.59
	6/6/2022	458.66	17.06	441.60	8.21	435.38
	7/25/2022	458.66	26.02	432.64	5.36	432.53
	8/29/2022	458.66	26.70	431.96	2.55	429.72
	9/28/2022	458.66	28.10	430.56	2.37	429.54
	10/26/2022	458.66	28.96	429.70	4.36	431.53
11/14/2022	458.66	28.44	430.22	3.2	430.37	
12/28/2022	458.66	26.04	432.62	N/A	N/A	
1/24/2023	458.66	24.93	433.73	7.29	434.46	
2/20/2023	458.66	23.72	434.94	7.6	434.77	
3/28/2023	458.66	16.49	442.17	14.9	442.07	
4/25/2023	458.66	19.50	439.16	9.4	436.57	
5/15/2023	458.66	21.71	436.95	8.78	435.95	
6/26/2023	458.66	27.11	431.55	2.42	429.59	
7/25/2023	458.66	26.76	431.90	3.67	430.84	
8/28/2023	458.66	27.46	431.20	3.26	430.43	
9/27/2023	458.66	27.73	430.93	3.35	430.52	
10/27/2023	458.66	26.00	432.66	3.98	431.15	
11/6/2023	458.66	26.98	431.68	3.65	430.82	
12/21/2023	458.66	26.91	431.75	6.12	433.29	

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)	Illinois River Gage Reading* (ft above datum)	Illinois River Gage Reading* (ft above MSL)
MW-10 up-gradient	6/22/2017	457.31	13.46	443.85	N/A	N/A
	8/24/2017	457.31	16.39	440.92	3.79	430.96
	11/9/2017	457.31	16.86	440.45	6.7	433.87
	5/16/2018	457.31	14.88	442.43	9.67	436.84
	8/8/2018	457.31	17.88	439.43	2.13	429.3
	10/30/2018	457.31	17.04	440.27	4.21	431.38
	2/25/2019	457.31	11.28	446.03	16.74	443.91
	4/29/2019	457.31	11.88	445.43	14.04	441.21
	8/26/2019	457.31	15.89	441.42	3.61	430.78
	2/24/2020	457.31	12.64	444.67	12.84	440.01
	4/27/2020	457.31	12.75	444.56	12.64	439.81
	12/7/2020	457.31	17.80	439.51	2.97	430.14
	2/22/2021	457.31	17.25	440.06	6.21	433.38
	4/7/2021	457.31	14.21	443.10	10.23	437.4
	5/10/2021	457.31	15.58	441.73	10.71	437.88
	6/2/2021	457.31	13.98	443.33	10.7	437.87
	6/28/2021	457.31	15.28	442.03	12.11	439.28
	7/19/2021	457.31	12.30	445.01	15.06	442.23
	8/23/2021	457.31	16.61	440.70	3.49	430.66
	9/30/2021	457.31	18.67	438.64	2.49	429.66
	10/25/2021	457.31	16.23	441.08	10.56	437.73
	11/29/2021	457.31	15.52	441.79	5.17	432.34
	12/30/2021	457.31	16.50	440.81	6.68	433.85
	1/6/2022	457.31	16.82	440.49	6.45	433.62
	2/7/2022	457.31	17.70	439.61	4.4	431.57
	3/1/2022	457.31	13.77	443.54	16.04	443.21
	4/22/2022	457.31	11.80	445.51	N/A	N/A
	5/24/2022	457.31	13.20	444.11	11.42	438.59
	6/6/2022	457.31	14.07	443.24	8.21	435.38
	7/25/2022	457.31	17.53	439.78	5.36	432.53
	8/29/2022	457.31	19.08	438.23	2.55	429.72
	9/28/2022	457.31	20.16	437.15	2.37	429.54
	10/26/2022	457.31	21.23	436.08	4.36	431.53
	11/14/2022	457.31	21.06	436.25	3.2	430.37
	12/28/2022	457.31	18.71	438.60	N/A	N/A
	1/24/2023	457.31	19.50	437.81	7.29	434.46
	2/20/2023	457.31	18.65	438.66	7.6	434.77
	3/28/2023	457.31	13.66	443.65	14.9	442.07
	4/25/2023	457.31	14.14	443.17	9.4	436.57
	5/15/2023	457.31	15.90	441.41	8.78	435.95
6/26/2023	457.31	20.10	437.21	2.42	429.59	
7/25/2023	457.31	19.69	437.62	3.67	430.84	
8/28/2023	457.31	20.38	436.93	3.26	430.43	
9/28/2023	457.31	20.93	436.38	3.35	430.52	
10/27/2023	457.31	20.67	436.64	3.98	431.15	
11/6/2023	457.31	20.81	436.50	3.65	430.82	
12/21/2023	457.31	20.80	436.51	6.12	433.29	

Notes: Elevations are in feet above mean sea level and Depths are in feet below top of casing.

* - Data obtained from USGS Kingston Mine Gage

MSL - Mean Sea Level

TOC - Top of Casing

BOLD- River elevation above groundwater elevation

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)
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
2/20/2023	Sandy	Northerly (Northwest - Northeast)	1.390E-03	0.0031	0.35	1.06
5/15/2023	Sandy	Northerly (Northwest - Northeast)	1.390E-03	0.0028	0.35	0.96
8/28/2023	Sandy	Northerly (Northwest - Northeast)	1.390E-03	0.0043	0.35	1.48
11/6/2023	Sandy	Northerly (Northwest - Northeast)	1.390E-03	0.0040	0.35	1.37

* 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 2023 - 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	2/22/2023	A
		5/17/2023	A
		8/29/2023	A
		11/7/2023	A
MW-10 (Upgradient)	4	2/22/2023	A
		5/17/2023	A
		8/29/2023	A
		11/7/2023	A
MW-02 (Downgradient)	4	2/21/2023	A
		5/16/2023	A
		8/28/2023	A
		11/7/2023	A
MW-03 (Downgradient)	4	2/21/2023	A
		5/16/2023	A
		8/28/2023	A
		11/7/2023	A
MW-04 (Downgradient)	4	2/21/2023	A
		5/16/2023	A
		8/28/2023	A
		11/7/2023	A
MW-05 (Downgradient)	4	2/21/2023	A
		5/16/2023	A
		8/29/2023	A
		11/7/2023	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	^	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		
2/22/2023	0.46	110	52	< 0.1	7.51	43	500		
5/17/2023	0.29	91	39	< 0.10	7.23	39	400		
8/29/2023	0.59	100	47	< 0.10	6.98	43	530		
11/7/2023	0.45	110	50	< 0.10	6.95	68	590		
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	
	2/22/2023	1.3	100	40	0.22	7.57	66	510	
	5/17/2023	1.8	130	34	0.25	7.07	84	610	
	8/29/2023	1.3	96	56	0.29	7.00	50	510	
11/7/2023	2.4	110	42	0.31	7.11	150	630		
12/22/2023R	NS	NS	NS	0.30	NS	120	610		
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	
	2/21/2023	2.5	110	49	0.14	7.64	92	630	
	5/16/2023	0.53	83	47	0.15	7.48	33	400	
	8/28/2023	2.7	94	46	0.16	7.17	70	490	
11/7/2023	3.6	120	45	0.15	7.14	170	680		
12/22/2023R	5.2	NS	NS	NS	NS	140	670		

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	
2/21/2023	1.0	96	53	0.20	7.75	70	550		
5/16/2023	0.15	80	69	0.21	7.42	31	420		
8/28/2023	0.32	73	82	0.2	7.28	36	430		
11/7/2023	1.1	90	59	0.19	7.29	91	530		
12/22/2023 R	2.0	NS	NS	NS	NS	81	NS		
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	
2/21/2023	0.75	89	54	0.22	7.58	54	540		
5/16/2023	0.66	100	51	0.27	7.21	120	550		
8/28/2023	0.78	95	72	0.24	7.02	110	610		
11/7/2023	0.78	100	59	0.21	7.01	150	620		
12/22/2023 R	1.3	NS	NS	NS	NS	80	560		
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	H 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		
2/21/2023	0.68	100	93	0.29	7.34	97	760		
5/16/2023	0.78	110	79	0.30	7.04	130	690		
8/29/2023	1.1	98	80	0.29	6.99	83	660		
11/7/2023	1.5	110	98	0.26	6.96	150	700		
12/22/2023 R	1.4	NS	NS	NS	NS	NS	NS		

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 5. Appendix IV Groundwater Analytical Results - Midwest Generation, LLC, Powerton Station, Pekin, IL, Former Ash Basin.

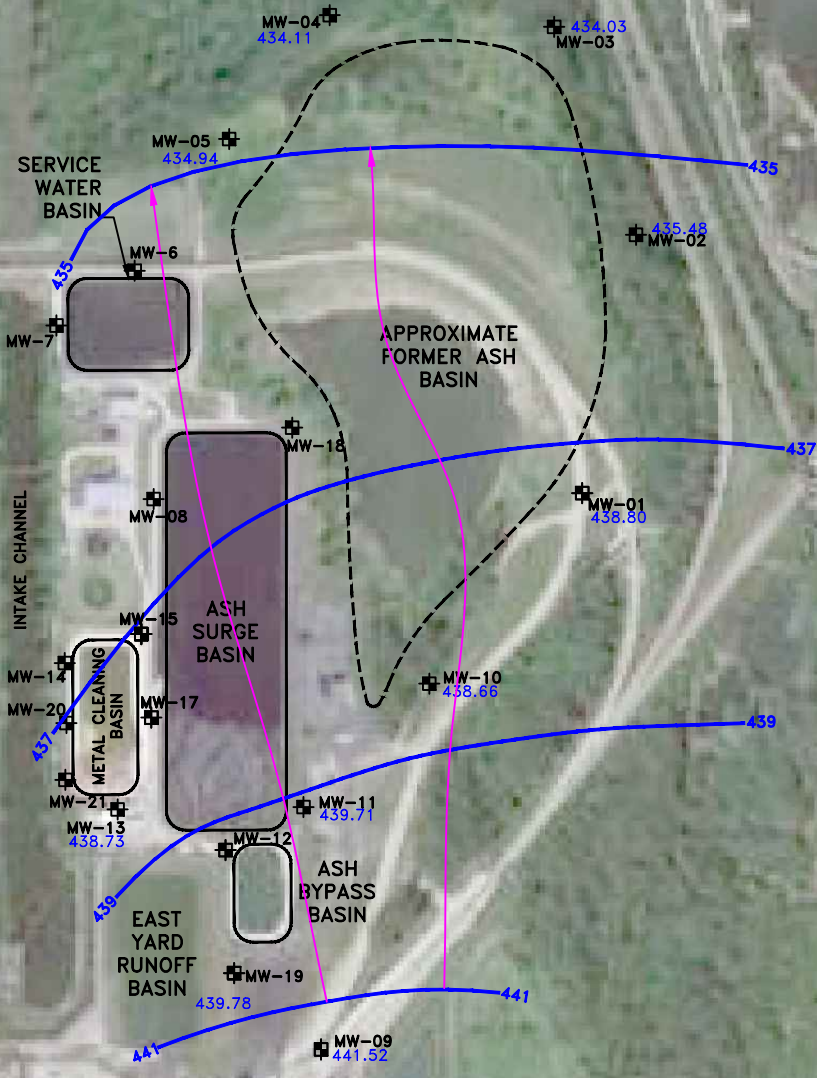
Well	Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228 Combined	Selenium	Thallium	
MW-03 down-gradient	6/20/2017	< 0.003	0.0013	0.066	< 0.001	< 0.0005	< 0.005	< 0.001	0.29	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.325	< 0.0025	< 0.002	
	8/23/2017	< 0.003	0.0010	0.066	< 0.001	< 0.0005	< 0.005	< 0.001	0.28	< 0.0005	< 0.01	< 0.0002	< 0.005	< 1.200	< 0.0025	< 0.002	
	11/7/2017	< 0.003	0.0013	0.068	< 0.001	< 0.0005	< 0.005	< 0.001	0.26	< 0.0005	< 0.01	< 0.0002	< 0.005	0.588	< 0.0025	< 0.002	
	5/15/2018	< 0.003	0.0010	0.059	< 0.001	< 0.0005	< 0.005	< 0.001	0.23	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.489	< 0.0025	< 0.002	
	8/7/2018	< 0.003	0.0015	0.067	< 0.001	< 0.0005	< 0.005	< 0.001	0.22	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.341	< 0.0025	< 0.002	
	10/30/2018	< 0.003	0.0014	0.056	< 0.001	< 0.0005	< 0.005	< 0.001	0.25	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.354	< 0.0025	< 0.002	
	2/26/2019	< 0.003	0.0013	0.054	< 0.001	< 0.0005	< 0.005	< 0.001	0.24	< 0.0007	< 0.01	< 0.0002	< 0.005	< 0.399	< 0.0025	< 0.002	
	4/30/2019	< 0.003	< 0.001	0.060	< 0.001	< 0.0005	< 0.005	< 0.001	0.22	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.668	< 0.0025	< 0.002	
	GWPS	NS	0.022	2.0	0.004	NS	0.063	0.119	4.0	0.36	NS	0.002	0.1	5.0	0.05	0.002	0.002
	8/26/2019	< 0.003	0.0014	0.069	< 0.001	< 0.0005	< 0.005	< 0.001	0.26	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.444	< 0.0025	< 0.002	
	2/24/2020	< 0.003	< 0.001	0.066	< 0.001	< 0.0005	< 0.005	< 0.001	0.22	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.400	< 0.0025	< 0.002	
	4/28/2020	NA	0.0013	0.066	NA	NA	< 0.005	< 0.001	0.22	< 0.0005	NA	NA	< 0.005	< 0.498	0.036	NA	
	12/9/2020	NA	< 0.001	0.086	NA	NA	< 0.005	< 0.001	0.28	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.432	< 0.0025	< 0.002	
	5/11/2021	< 0.003	< 0.001	0.07	< 0.001	< 0.0005	< 0.005	< 0.001	0.21	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.519	< 0.0025	< 0.002	
	8/24/2021	< 0.003	0.0012	0.072	< 0.001	< 0.0005	< 0.005	< 0.001	0.25	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.444	< 0.0025	< 0.002	
	11/30/2021	< 0.003	0.0014	0.063	< 0.001	< 0.0005	< 0.005	< 0.001	0.26	< 0.0005	0.004	< 0.0002	< 0.005	< 0.436	< 0.0025	< 0.002	
	2/8/2022	< 0.003	0.001	0.058	< 0.001	< 0.0005	< 0.005	< 0.001	0.21	< 0.0005	0.003	< 0.0002	< 0.005	< 0.593	< 0.0025	< 0.002	
	6/7/2022	< 0.003	0.0012	0.064	< 0.001	< 0.0005	< 0.005	< 0.001	0.22	< 0.0005	< 0.01	< 0.0002	< 0.005	0.851	< 0.0025	< 0.002	
	8/30/2022	< 0.003	< 0.001	0.1	^u < 0.001	< 0.0005	< 0.005	< 0.001	0.21	< 0.0005	^u < 0.01	< 0.0002	< 0.005	0.589	< 0.0025	< 0.002	
	11/14/2022	< 0.003	< 0.001	0.11	< 0.001	< 0.0005	< 0.005	< 0.001	0.28	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.54	< 0.0025	< 0.002	
	2/21/2023	< 0.003	< 0.001	0.11	< 0.001	< 0.0005	< 0.005	< 0.001	0.2	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.493	< 0.0025	< 0.002	
	5/16/2023	< 0.0030	< 0.0010	0.068	^u ^t+ < 0.0010	< 0.00050	< 0.0050	< 0.0010	0.21	< 0.00050	< 0.010	< 0.00020	< 0.0050	0.993	0.038	< 0.0020	
	8/29/2023	< 0.0020	< 0.0020	0.096	< 0.0010	< 0.00050	< 0.0050	< 0.00050	0.2	< 0.00050	< 0.010	< 0.00020	< 0.0023	< 0.674	0.070	0.003	
	11/7/2023	< 0.0030	< 0.0010	0.12	< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.19	< 0.00050	^u < 0.010	< 0.00020	< 0.0050	< 0.078	0.055	< 0.0020	
	MW-04 down-gradient	6/20/2017	< 0.003	< 0.001	0.025	< 0.001	< 0.0005	< 0.005	< 0.001	0.29	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.343	< 0.0025	< 0.002
		8/28/2017	< 0.003	< 0.001	0.028	< 0.001	< 0.0005	< 0.005	< 0.001	0.33	< 0.0005	< 0.01	< 0.0002	< 0.013	< 0.246	< 0.0025	< 0.002
		11/7/2017	< 0.003	< 0.001	0.051	< 0.001	< 0.0005	< 0.005	< 0.001	0.24	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.332	0.092	< 0.002
5/15/2018		< 0.003	< 0.001	0.037	< 0.001	< 0.0005	< 0.005	< 0.001	0.27	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.661	< 0.0025	< 0.002	
8/7/2018		< 0.003	0.0011	0.031	< 0.001	< 0.0005	< 0.005	< 0.001	0.32	< 0.0005	< 0.01	< 0.0002	0.006	< 0.334	< 0.0025	< 0.002	
10/30/2018		< 0.003	< 0.001	0.049	< 0.001	< 0.0005	< 0.005	< 0.001	0.24	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.423	< 0.0025	< 0.002	
2/26/2019		< 0.003	0.0013	0.033	< 0.001	< 0.0005	< 0.005	0.001	0.25	0.0012	< 0.01	< 0.0002	< 0.005	0.366	< 0.0025	< 0.002	
4/30/2019		< 0.003	< 0.001	0.026	< 0.001	< 0.0005	< 0.005	< 0.001	0.25	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.684	< 0.0025	< 0.002	
GWPS		NS	0.022	2.0	0.004	NS	0.063	0.119	4.0	0.36	NS	0.002	0.1	5.0	0.05	0.002	0.002
8/26/2019		< 0.003	< 0.001	0.032	< 0.001	< 0.0005	< 0.005	< 0.001	0.24	< 0.0005	< 0.01	< 0.0002	0.008	1.090	< 0.0025	< 0.002	
2/24/2020		< 0.003	< 0.001	0.024	< 0.001	< 0.0005	< 0.005	< 0.001	0.20	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.595	< 0.0025	< 0.002	
4/28/2020		NA	< 0.001	0.025	NA	NA	< 0.005	< 0.001	0.27	< 0.0005	NA	NA	< 0.005	< 0.465	< 0.0025	NA	
12/9/2020		NA	< 0.001	0.034	NA	NA	< 0.005	< 0.001	0.32	< 0.0005	< 0.01	< 0.0002	0.0076	< 0.411	< 0.0025	NA	
5/11/2021		< 0.003	< 0.001	0.025	< 0.001	< 0.0005	< 0.005	< 0.001	0.33	< 0.0005	< 0.01	< 0.0002	< 0.005	0.533	< 0.0025	< 0.002	
8/24/2021		< 0.003	< 0.001	0.024	< 0.001	< 0.0005	< 0.005	< 0.001	0.34	< 0.0005	< 0.01	< 0.0002	0.014	< 0.427	< 0.0025	< 0.002	
11/30/2021		< 0.003	0.0012	0.035	< 0.001	< 0.0005	< 0.005	< 0.001	0.25	< 0.0005	0.0035	< 0.0002	< 0.005	< 0.419	< 0.0025	< 0.002	
2/8/2022		< 0.003	< 0.001	0.03	< 0.001	< 0.0005	< 0.005	< 0.001	0.29	< 0.0005	0.0038	< 0.0002	0.006	0.818	< 0.0025	< 0.002	
6/7/2022		< 0.003	< 0.001	0.025	< 0.001	< 0.0005	< 0.005	< 0.001	0.30	< 0.0005	< 0.01	< 0.0002	0.0051	< 0.473	< 0.0025	< 0.002	
8/30/2022		< 0.003	< 0.001	0.034	^u < 0.001	< 0.0005	< 0.005	< 0.001	0.21	< 0.0005	^u < 0.01	< 0.0002	< 0.005	< 0.546	< 0.0025	< 0.002	
11/14/2022		< 0.003	< 0.001	0.08	< 0.001	< 0.0005	< 0.005	< 0.001	0.20	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.583	0.074	< 0.002	
2/21/2023		< 0.003	< 0.001	0.035	< 0.001	< 0.0005	< 0.005	< 0.001	0.22	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.567	0.037	< 0.002	
5/16/2023		< 0.0030	< 0.0010	0.034	^u ^t+ < 0.0010	< 0.00050	< 0.0050	< 0.0010	0.27	< 0.00050	< 0.010	< 0.00020	< 0.0050	< 0.624	< 0.0025	< 0.0020	
8/29/2023		< 0.0020	< 0.0020	0.062	< 0.0010	< 0.00050	< 0.0050	< 0.00050	0.24	< 0.00050	< 0.010	< 0.00020	< 0.0020	< 0.669	< 0.005	< 0.0010	
11/7/2023		< 0.0030	< 0.0010	0.065	< 0.0010	< 0.00050	< 0.0050	< 0.0010	0.21	< 0.00050	^u < 0.010	< 0.00020	< 0.0050	0.679	0.070	< 0.0020	
MW-05 down-gradient		5/17/2016	< 0.003	< 0.001	0.061	< 0.001	< 0.0005	< 0.005	< 0.001	0.35	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.373	< 0.0025	< 0.002
		8/16/2016	< 0.003	< 0.001	0.060	< 0.001	< 0.0005	< 0.005	< 0.001	0.30	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.452	< 0.0025	< 0.002
		11/15/2016	< 0.003	< 0.001	0.051	< 0.001	< 0.0005	< 0.005	< 0.001	0.23	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.449	< 0.0025	< 0.002
	2/14/2017	< 0.003	< 0.001	0.062	< 0.001	< 0.0005	< 0.005	< 0.001	0.25	0.00091	< 0.01	< 0.0002	< 0.005	< 0.359	< 0.0025	< 0.002	
	5/1/2017	< 0.003	< 0.001	0.059	< 0.001	< 0.0005	< 0.005	< 0.001	0.28	< 0.0005	< 0.01	< 0.0002	0.0066	< 0.439	< 0.0025	< 0.002	
	6/20/2017	< 0.003	< 0.001	0.048	< 0.001	< 0.0005	< 0.005	< 0.001	0.28	< 0.0005	< 0.01	< 0.0002	0.0061	< 0.365	< 0.0025	< 0.002	
	8/28/2017	< 0.003	< 0.001	0.064	< 0.001	< 0.0005	< 0.005	< 0.001	0.33	< 0.0005	< 0.01	< 0.0002	0.0085	0.381	< 0.0025	< 0.002	
	11/7/2017	< 0.003	< 0.001	0.058	< 0.001	< 0.0005	< 0.005	< 0.001	0.31	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.341	< 0.0025	< 0.002	
	5/15/2018	< 0.003	< 0.001	0.062	< 0.001	< 0.0005	< 0.005	< 0.001	0.29	< 0.0005	< 0.01	< 0.0002	< 0.005	< 0.390	< 0.0025	< 0.002	
	8/7/2018	< 0.003	< 0.001	0.054	< 0.001	< 0.0005	< 0.005	< 0.001	0.32	< 0.0005	< 0.01	< 0.0002	0.0069	0.523	< 0.0025	< 0.002	
	4/30/2019	< 0.003	< 0.001	0.041	< 0.001	< 0.0005	< 0.005	< 0.001	0.36	< 0.0005	< 0.01	< 0.0002	0.0061	< 0.709	< 0.0025	< 0.002	

ATTACHMENT 1
Groundwater Flow Contour Maps

ILLINOIS RIVER *434.77



COAL STORAGE PILE



LEGEND

MW-8 MONITORING WELL

448 GROUNDWATER CONTOUR

GROUNDWATER FLOW LINE

NOTE: * IL River elevation in an approximation from the Downstream USGS Kingston Mines gage.

MAIN BUILDING

0 500'
APPROXIMATE SCALE

ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R G

KPRG and Associates, inc.

**POTENTIOMETRIC MAP
ABB/ASB GRAVELY SAND UNIT 02/2023**

**POWERTON STATION
PEKIN, ILLINOIS**

Scale: 1" = 500'

Date: June 29, 2023

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

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

KPRG Project No. 12313.1

ATTACHMENT 1

ILLINOIS RIVER

*435.95



COAL STORAGE PILE

SERVICE WATER BASIN

APPROXIMATE FORMER ASH BASIN

ASH SURGE BASIN

ASH BYPASS BASIN

EAST YARD RUNOFF BASIN

INTAKE CHANNEL

MAIN BUILDING

LEGEND

MW-8 MONITORING WELL

448 GROUNDWATER CONTOUR

GROUNDWATER FLOW LINE

NOTE: * IL River elevation in an approximation from the Downstream USGS Kingston Mines gage.

0 500'
APPROXIMATE SCALE

ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R G

KPRG and Associates, inc.

**POTENTIOMETRIC MAP
ABB/ASB GRAVELY SAND UNIT 05/2023**

POWERTON STATION
PEKIN, ILLINOIS

Scale: 1" = 500'

Date: June 29, 2023

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

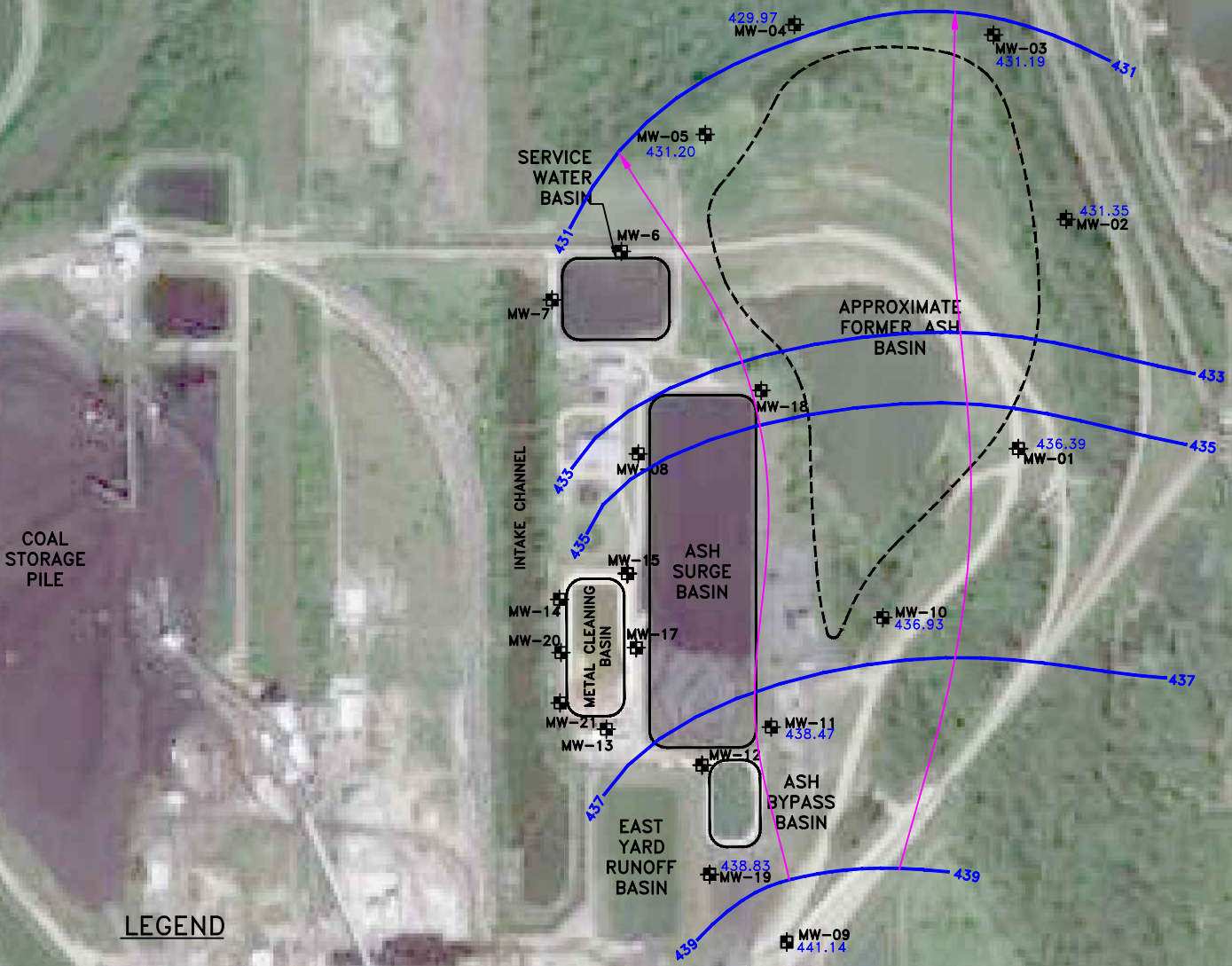
14665 West Lisbon Road, Suite 1A Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

KPRG Project No. 12313.1

ATTACHMENT 1

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

ILLINOIS RIVER *430.43



LEGEND

- MW-8 MONITORING WELL
- 448 GROUNDWATER CONTOUR
- GROUNDWATER FLOW LINE

NOTE: * IL River elevation in an approximation from the Downstream USGS Kingston Mines gage.

0 500'
APPROXIMATE SCALE

ENVIRONMENTAL CONSULTATION & REMEDIATION



KPRG and Associates, inc.

**POTENTIOMETRIC MAP
ABB/ASB GRAVELY SAND UNIT 08/2023**

**POWERTON STATION
PEKIN, ILLINOIS**

Scale: 1" = 500'

Date: September 12, 2023

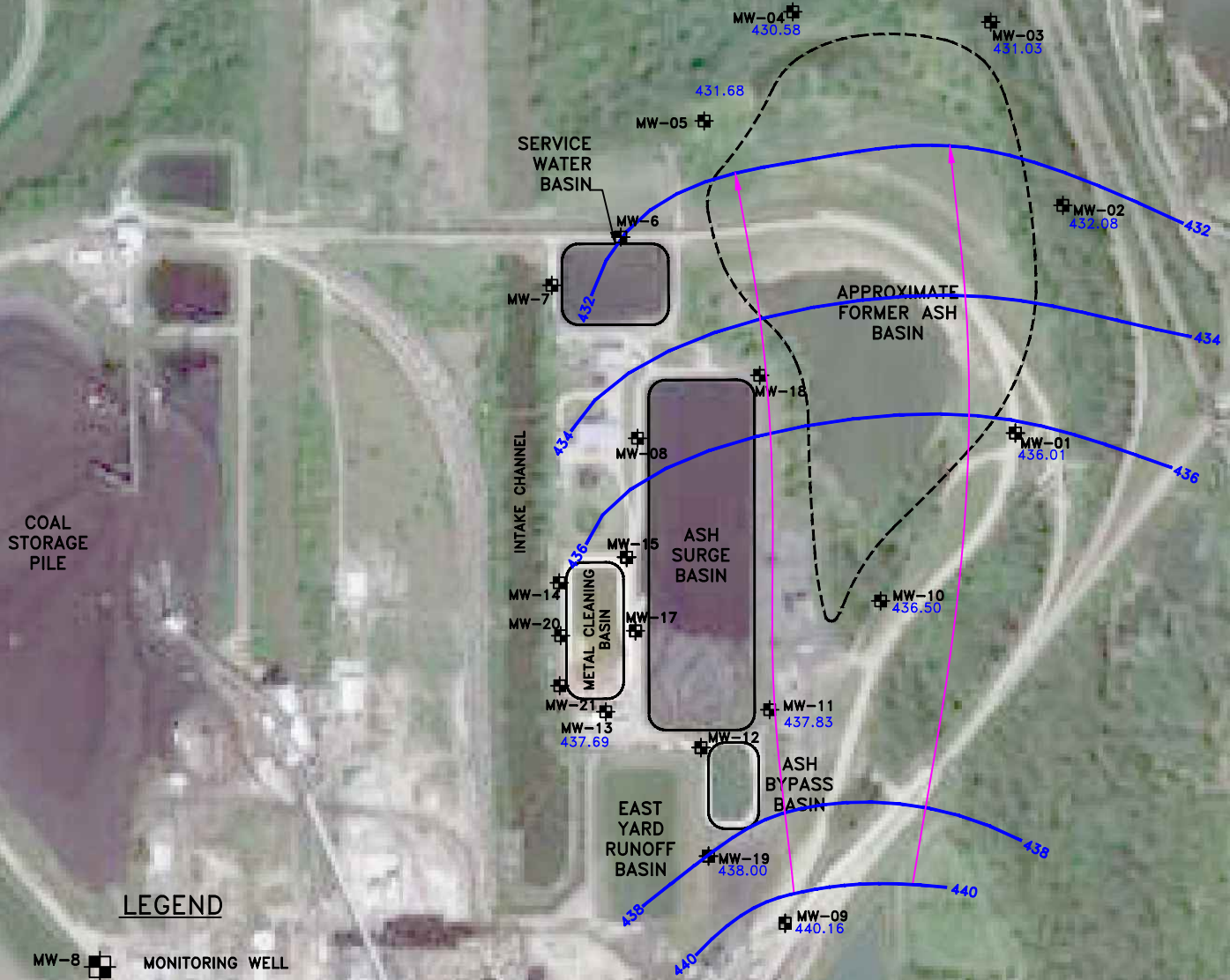
414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

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

KPRG Project No. 12313.1

ATTACHMENT 1

ILLINOIS RIVER *430.82



LEGEND

MW-8 MONITORING WELL

448 GROUNDWATER CONTOUR

GROUNDWATER FLOW LINE

NOTE: * IL River elevation in an approximation from the Downstream USGS Kingston Mines gage.

MAIN BUILDING

0 500'
APPROXIMATE SCALE

ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R G

KPRG and Associates, inc.

**POTENTIOMETRIC MAP
ABB/ASB GRAVELY SAND UNIT 11/2023**

**POWERTON STATION
PEKIN, ILLINOIS**

Scale: 1" = 500'

Date: December 28, 2023

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

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

KPRG Project No. 12313.1

ATTACHMENT 1

ATTACHMENT 2
Analytical Data Packages

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

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

Generated 3/8/2023 5:36:46 PM

JOB DESCRIPTION

Powerton CCR FAB

JOB NUMBER

500-229775-1

Eurofins Chicago

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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

Authorization



Generated
3/8/2023 5:36:46 PM

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



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	14
QC Association	15
QC Sample Results	18
Chain of Custody	25
Receipt Checklists	29
Chronicle	30
Certification Summary	33

Case Narrative

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

Job ID: 500-229775-1

Job ID: 500-229775-1

Laboratory: Eurofins Chicago

Narrative

**Job Narrative
500-229775-1**

Comments

No additional comments.

Receipt

The samples were received on 2/22/2023 9:55 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were -0.3° C, 1.5° C and 1.6° 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.

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

Method Summary

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

Job ID: 500-229775-1

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: 500-229775-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-229775-1	MW-02	Water	02/21/23 08:15	02/22/23 09:55
500-229775-2	MW-03	Water	02/21/23 09:27	02/22/23 09:55
500-229775-3	MW-04	Water	02/21/23 10:37	02/22/23 09:55
500-229775-4	MW-05	Water	02/21/23 11:36	02/22/23 09:55
500-229775-5	Duplicate	Water	02/21/23 00:00	02/22/23 09:55
500-229775-6	MW-01	Water	02/22/23 10:22	02/23/23 09:50
500-229775-7	MW-10	Water	02/22/23 09:27	02/23/23 09:50

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

Client Sample Results

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

Job ID: 500-229775-1

Client Sample ID: MW-02

Lab Sample ID: 500-229775-1

Date Collected: 02/21/23 08:15

Matrix: Water

Date Received: 02/22/23 09:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/22/23 16:18	02/23/23 12:44	1
Arsenic	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 14:53	1
Barium	0.095		0.0025		mg/L		02/22/23 16:18	02/23/23 12:44	1
Beryllium	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 12:44	1
Boron	2.5		0.050		mg/L		02/22/23 16:18	02/23/23 12:44	1
Cadmium	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 12:44	1
Calcium	110		0.20		mg/L		02/22/23 16:18	02/23/23 12:44	1
Chromium	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 12:44	1
Cobalt	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 12:44	1
Lead	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 12:44	1
Lithium	<0.010		0.010		mg/L		02/22/23 16:18	02/23/23 12:44	1
Molybdenum	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 12:44	1
Selenium	<0.0025		0.0025		mg/L		02/22/23 16:18	02/23/23 12:44	1
Thallium	<0.0020		0.0020		mg/L		02/22/23 16:18	02/23/23 12:44	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/02/23 11:45	03/03/23 09:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	630		10		mg/L			02/23/23 04:10	1
Chloride (SM 4500 Cl- E)	49		10		mg/L			02/28/23 10:53	5
Fluoride (SM 4500 F C)	0.14		0.10		mg/L			02/23/23 13:49	1
Sulfate (SM 4500 SO4 E)	92		25		mg/L			02/28/23 12:19	5

Client Sample Results

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

Job ID: 500-229775-1

Client Sample ID: MW-03
Date Collected: 02/21/23 09:27
Date Received: 02/22/23 09:55

Lab Sample ID: 500-229775-2
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		02/22/23 16:18	02/23/23 13:02	1
Arsenic	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 15:10	1
Barium	0.11		0.0025		mg/L		02/22/23 16:18	02/23/23 13:02	1
Beryllium	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 13:02	1
Boron	1.0		0.050		mg/L		02/22/23 16:18	02/23/23 13:02	1
Cadmium	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 13:02	1
Calcium	96		0.20		mg/L		02/22/23 16:18	02/23/23 13:02	1
Chromium	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 13:02	1
Cobalt	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 13:02	1
Lead	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 13:02	1
Lithium	<0.010		0.010		mg/L		02/22/23 16:18	02/23/23 13:02	1
Molybdenum	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 13:02	1
Selenium	<0.0025		0.0025		mg/L		02/22/23 16:18	02/23/23 13:02	1
Thallium	<0.0020		0.0020		mg/L		02/22/23 16:18	02/23/23 13:02	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/02/23 11:45	03/03/23 09:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	550		10		mg/L			02/23/23 04:12	1
Chloride (SM 4500 Cl- E)	53		10		mg/L			02/28/23 10:53	5
Fluoride (SM 4500 F C)	0.20		0.10		mg/L			02/23/23 13:49	1
Sulfate (SM 4500 SO4 E)	70		25		mg/L			02/28/23 12:20	5

Client Sample Results

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

Job ID: 500-229775-1

Client Sample ID: MW-04
Date Collected: 02/21/23 10:37
Date Received: 02/22/23 09:55

Lab Sample ID: 500-229775-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/22/23 16:18	02/23/23 13:05	1
Arsenic	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 15:14	1
Barium	0.035		0.0025		mg/L		02/22/23 16:18	02/23/23 13:05	1
Beryllium	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 13:05	1
Boron	0.75		0.050		mg/L		02/22/23 16:18	02/23/23 13:05	1
Cadmium	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 13:05	1
Calcium	89		0.20		mg/L		02/22/23 16:18	02/23/23 13:05	1
Chromium	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 13:05	1
Cobalt	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 13:05	1
Lead	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 13:05	1
Lithium	<0.010		0.010		mg/L		02/22/23 16:18	02/23/23 13:05	1
Molybdenum	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 13:05	1
Selenium	0.0037		0.0025		mg/L		02/22/23 16:18	02/23/23 13:05	1
Thallium	<0.0020		0.0020		mg/L		02/22/23 16:18	02/23/23 13:05	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/02/23 11:45	03/03/23 09:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	540		10		mg/L			02/23/23 04:15	1
Chloride (SM 4500 Cl- E)	54		10		mg/L			02/28/23 10:54	5
Fluoride (SM 4500 F C)	0.22		0.10		mg/L			02/23/23 13:49	1
Sulfate (SM 4500 SO4 E)	54		25		mg/L			02/28/23 12:20	5

Client Sample Results

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

Job ID: 500-229775-1

Client Sample ID: MW-05

Lab Sample ID: 500-229775-4

Date Collected: 02/21/23 11:36

Matrix: Water

Date Received: 02/22/23 09:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/22/23 16:18	02/23/23 13:08	1
Arsenic	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 15:17	1
Barium	0.052		0.0025		mg/L		02/22/23 16:18	02/23/23 13:08	1
Beryllium	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 13:08	1
Boron	0.68		0.050		mg/L		02/22/23 16:18	02/23/23 13:08	1
Cadmium	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 13:08	1
Calcium	100		0.20		mg/L		02/22/23 16:18	02/23/23 13:08	1
Chromium	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 13:08	1
Cobalt	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 13:08	1
Lead	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 13:08	1
Lithium	<0.010		0.010		mg/L		02/22/23 16:18	02/23/23 13:08	1
Molybdenum	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 13:08	1
Selenium	0.0031		0.0025		mg/L		02/22/23 16:18	02/23/23 13:08	1
Thallium	<0.0020		0.0020		mg/L		02/22/23 16:18	02/23/23 13:08	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/02/23 11:45	03/03/23 09:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	760		10		mg/L			02/23/23 04:18	1
Chloride (SM 4500 Cl- E)	93		10		mg/L			02/28/23 10:54	5
Fluoride (SM 4500 F C)	0.29		0.10		mg/L			02/23/23 13:49	1
Sulfate (SM 4500 SO4 E)	97		25		mg/L			02/28/23 12:21	5

Client Sample Results

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

Job ID: 500-229775-1

Client Sample ID: Duplicate
Date Collected: 02/21/23 00:00
Date Received: 02/22/23 09:55

Lab Sample ID: 500-229775-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/22/23 16:18	02/23/23 13:20	1
Arsenic	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 15:27	1
Barium	0.11		0.0025		mg/L		02/22/23 16:18	02/23/23 13:20	1
Beryllium	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 13:20	1
Boron	0.94		0.050		mg/L		02/22/23 16:18	02/23/23 13:20	1
Cadmium	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 13:20	1
Calcium	90		0.20		mg/L		02/22/23 16:18	02/23/23 13:20	1
Chromium	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 13:20	1
Cobalt	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 13:20	1
Lead	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 13:20	1
Lithium	<0.010		0.010		mg/L		02/22/23 16:18	02/23/23 13:20	1
Molybdenum	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 13:20	1
Selenium	<0.0025		0.0025		mg/L		02/22/23 16:18	02/23/23 13:20	1
Thallium	<0.0020		0.0020		mg/L		02/22/23 16:18	02/23/23 13:20	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/02/23 11:45	03/03/23 09:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	560		10		mg/L			02/23/23 04:20	1
Chloride (SM 4500 Cl- E)	54		10		mg/L			02/28/23 10:54	5
Fluoride (SM 4500 F C)	0.20		0.10		mg/L			02/23/23 13:49	1
Sulfate (SM 4500 SO4 E)	66		25		mg/L			02/28/23 12:21	5

Client Sample Results

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

Job ID: 500-229775-1

Client Sample ID: MW-01
Date Collected: 02/22/23 10:22
Date Received: 02/23/23 09:50

Lab Sample ID: 500-229775-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/23/23 16:26	02/24/23 12:00	1
Arsenic	<0.0010		0.0010		mg/L		02/23/23 16:26	02/24/23 12:00	1
Barium	0.082		0.0025		mg/L		02/23/23 16:26	02/24/23 12:00	1
Beryllium	<0.0010		0.0010		mg/L		02/23/23 16:26	02/24/23 12:00	1
Boron	0.46		0.050		mg/L		02/23/23 16:26	02/24/23 12:00	1
Cadmium	<0.00050		0.00050		mg/L		02/23/23 16:26	02/24/23 12:00	1
Calcium	110		0.20		mg/L		02/23/23 16:26	02/24/23 12:00	1
Chromium	<0.0050		0.0050		mg/L		02/23/23 16:26	02/24/23 12:00	1
Cobalt	<0.0010		0.0010		mg/L		02/23/23 16:26	02/24/23 12:00	1
Lead	<0.00050		0.00050		mg/L		02/23/23 16:26	02/24/23 12:00	1
Lithium	<0.010		0.010		mg/L		02/23/23 16:26	02/24/23 12:00	1
Molybdenum	<0.0050		0.0050		mg/L		02/23/23 16:26	02/24/23 12:00	1
Selenium	<0.0025		0.0025		mg/L		02/23/23 16:26	02/24/23 12:00	1
Thallium	<0.0020		0.0020		mg/L		02/23/23 16:26	02/24/23 12:00	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/02/23 11:45	03/03/23 10:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	500		10		mg/L			02/24/23 02:06	1
Chloride (SM 4500 Cl- E)	52		10		mg/L			02/28/23 10:54	5
Fluoride (SM 4500 F C)	<0.10		0.10		mg/L			02/28/23 14:13	1
Sulfate (SM 4500 SO4 E)	43		25		mg/L			02/28/23 12:22	5

Client Sample Results

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

Job ID: 500-229775-1

Client Sample ID: MW-10
Date Collected: 02/22/23 09:27
Date Received: 02/23/23 09:50

Lab Sample ID: 500-229775-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/23/23 16:26	02/24/23 12:17	1
Arsenic	0.0010		0.0010		mg/L		02/23/23 16:26	02/24/23 12:17	1
Barium	0.22		0.0025		mg/L		02/23/23 16:26	02/24/23 12:17	1
Beryllium	<0.0010		0.0010		mg/L		02/23/23 16:26	02/24/23 12:17	1
Boron	1.3		0.050		mg/L		02/23/23 16:26	02/24/23 12:17	1
Cadmium	<0.00050		0.00050		mg/L		02/23/23 16:26	02/24/23 12:17	1
Calcium	100		0.20		mg/L		02/23/23 16:26	02/24/23 12:17	1
Chromium	<0.0050		0.0050		mg/L		02/23/23 16:26	02/24/23 12:17	1
Cobalt	0.0039		0.0010		mg/L		02/23/23 16:26	02/24/23 12:17	1
Lead	0.00057		0.00050		mg/L		02/23/23 16:26	02/24/23 12:17	1
Lithium	<0.010		0.010		mg/L		02/23/23 16:26	02/24/23 12:17	1
Molybdenum	<0.0050		0.0050		mg/L		02/23/23 16:26	02/24/23 12:17	1
Selenium	0.0040		0.0025		mg/L		02/23/23 16:26	02/24/23 12:17	1
Thallium	<0.0020		0.0020		mg/L		02/23/23 16:26	02/24/23 12:17	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/02/23 11:45	03/03/23 10:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	510		10		mg/L			02/24/23 02:09	1
Chloride (SM 4500 Cl- E)	40		10		mg/L			02/28/23 10:55	5
Fluoride (SM 4500 F C)	0.22		0.10		mg/L			02/28/23 14:13	1
Sulfate (SM 4500 SO4 E)	66		25		mg/L			02/28/23 12:36	5

Definitions/Glossary

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

Job ID: 500-229775-1

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: 500-229775-1

Metals

Prep Batch: 699812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total Recoverable	Water	3005A	
500-229775-2	MW-03	Total Recoverable	Water	3005A	
500-229775-3	MW-04	Total Recoverable	Water	3005A	
500-229775-4	MW-05	Total Recoverable	Water	3005A	
500-229775-5	Duplicate	Total Recoverable	Water	3005A	
MB 500-699812/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-699812/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-229775-1 MS	MW-02	Total Recoverable	Water	3005A	
500-229775-1 MSD	MW-02	Total Recoverable	Water	3005A	
500-229775-1 DU	MW-02	Total Recoverable	Water	3005A	

Analysis Batch: 699991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total Recoverable	Water	6020A	699812
500-229775-2	MW-03	Total Recoverable	Water	6020A	699812
500-229775-3	MW-04	Total Recoverable	Water	6020A	699812
500-229775-4	MW-05	Total Recoverable	Water	6020A	699812
500-229775-5	Duplicate	Total Recoverable	Water	6020A	699812
MB 500-699812/1-A	Method Blank	Total Recoverable	Water	6020A	699812
LCS 500-699812/2-A	Lab Control Sample	Total Recoverable	Water	6020A	699812
500-229775-1 MS	MW-02	Total Recoverable	Water	6020A	699812
500-229775-1 MSD	MW-02	Total Recoverable	Water	6020A	699812
500-229775-1 DU	MW-02	Total Recoverable	Water	6020A	699812

Analysis Batch: 699994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total Recoverable	Water	6020A	699812
500-229775-2	MW-03	Total Recoverable	Water	6020A	699812
500-229775-3	MW-04	Total Recoverable	Water	6020A	699812
500-229775-4	MW-05	Total Recoverable	Water	6020A	699812
500-229775-5	Duplicate	Total Recoverable	Water	6020A	699812
MB 500-699812/1-A	Method Blank	Total Recoverable	Water	6020A	699812
LCS 500-699812/2-A	Lab Control Sample	Total Recoverable	Water	6020A	699812
500-229775-1 MS	MW-02	Total Recoverable	Water	6020A	699812
500-229775-1 MSD	MW-02	Total Recoverable	Water	6020A	699812
500-229775-1 DU	MW-02	Total Recoverable	Water	6020A	699812

Prep Batch: 700008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-6	MW-01	Total Recoverable	Water	3005A	
500-229775-7	MW-10	Total Recoverable	Water	3005A	
MB 500-700008/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-700008/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-229775-6 MS	MW-01	Total Recoverable	Water	3005A	
500-229775-6 MSD	MW-01	Total Recoverable	Water	3005A	
500-229775-6 DU	MW-01	Total Recoverable	Water	3005A	

Analysis Batch: 700200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-6	MW-01	Total Recoverable	Water	6020A	700008
500-229775-7	MW-10	Total Recoverable	Water	6020A	700008

Eurofins Chicago

QC Association Summary

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

Job ID: 500-229775-1

Metals (Continued)

Analysis Batch: 700200 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-700008/1-A	Method Blank	Total Recoverable	Water	6020A	700008
LCS 500-700008/2-A	Lab Control Sample	Total Recoverable	Water	6020A	700008
500-229775-6 MS	MW-01	Total Recoverable	Water	6020A	700008
500-229775-6 MSD	MW-01	Total Recoverable	Water	6020A	700008
500-229775-6 DU	MW-01	Total Recoverable	Water	6020A	700008

Prep Batch: 700891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total/NA	Water	7470A	
500-229775-2	MW-03	Total/NA	Water	7470A	
500-229775-3	MW-04	Total/NA	Water	7470A	
500-229775-4	MW-05	Total/NA	Water	7470A	
500-229775-5	Duplicate	Total/NA	Water	7470A	
500-229775-6	MW-01	Total/NA	Water	7470A	
500-229775-7	MW-10	Total/NA	Water	7470A	
MB 500-700891/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-700891/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-229775-5 MS	Duplicate	Total/NA	Water	7470A	
500-229775-5 MSD	Duplicate	Total/NA	Water	7470A	
500-229775-5 DU	Duplicate	Total/NA	Water	7470A	

Analysis Batch: 701104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total/NA	Water	7470A	700891
500-229775-2	MW-03	Total/NA	Water	7470A	700891
500-229775-3	MW-04	Total/NA	Water	7470A	700891
500-229775-4	MW-05	Total/NA	Water	7470A	700891
500-229775-5	Duplicate	Total/NA	Water	7470A	700891
500-229775-6	MW-01	Total/NA	Water	7470A	700891
500-229775-7	MW-10	Total/NA	Water	7470A	700891
MB 500-700891/12-A	Method Blank	Total/NA	Water	7470A	700891
LCS 500-700891/13-A	Lab Control Sample	Total/NA	Water	7470A	700891
500-229775-5 MS	Duplicate	Total/NA	Water	7470A	700891
500-229775-5 MSD	Duplicate	Total/NA	Water	7470A	700891
500-229775-5 DU	Duplicate	Total/NA	Water	7470A	700891

General Chemistry

Analysis Batch: 699823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total/NA	Water	SM 2540C	
500-229775-2	MW-03	Total/NA	Water	SM 2540C	
500-229775-3	MW-04	Total/NA	Water	SM 2540C	
500-229775-4	MW-05	Total/NA	Water	SM 2540C	
500-229775-5	Duplicate	Total/NA	Water	SM 2540C	
MB 500-699823/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-699823/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 699977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total/NA	Water	SM 4500 F C	

Eurofins Chicago

QC Association Summary

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

Job ID: 500-229775-1

General Chemistry (Continued)

Analysis Batch: 699977 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-2	MW-03	Total/NA	Water	SM 4500 F C	
500-229775-3	MW-04	Total/NA	Water	SM 4500 F C	
500-229775-4	MW-05	Total/NA	Water	SM 4500 F C	
500-229775-5	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-699977/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-699977/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 700037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-6	MW-01	Total/NA	Water	SM 2540C	
500-229775-7	MW-10	Total/NA	Water	SM 2540C	
MB 500-700037/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-700037/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 700503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total/NA	Water	SM 4500 Cl- E	
500-229775-2	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-229775-3	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-229775-4	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-229775-5	Duplicate	Total/NA	Water	SM 4500 Cl- E	
500-229775-6	MW-01	Total/NA	Water	SM 4500 Cl- E	
500-229775-7	MW-10	Total/NA	Water	SM 4500 Cl- E	
MB 500-700503/16	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-700503/17	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 700520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-229775-2	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-229775-3	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-229775-4	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-229775-5	Duplicate	Total/NA	Water	SM 4500 SO4 E	
500-229775-6	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-229775-7	MW-10	Total/NA	Water	SM 4500 SO4 E	
MB 500-700520/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-700520/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 700591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-6	MW-01	Total/NA	Water	SM 4500 F C	
500-229775-7	MW-10	Total/NA	Water	SM 4500 F C	
MB 500-700591/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-700591/4	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: 500-229775-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-699812/1-A
Matrix: Water
Analysis Batch: 699991

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 699812

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0030		0.0030		mg/L		02/22/23 16:18	02/23/23 12:37	1
Barium	<0.0025		0.0025		mg/L		02/22/23 16:18	02/23/23 12:37	1
Beryllium	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 12:37	1
Boron	<0.050		0.050		mg/L		02/22/23 16:18	02/23/23 12:37	1
Cadmium	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 12:37	1
Calcium	<0.20		0.20		mg/L		02/22/23 16:18	02/23/23 12:37	1
Chromium	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 12:37	1
Cobalt	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 12:37	1
Lead	<0.00050		0.00050		mg/L		02/22/23 16:18	02/23/23 12:37	1
Lithium	<0.010		0.010		mg/L		02/22/23 16:18	02/23/23 12:37	1
Molybdenum	<0.0050		0.0050		mg/L		02/22/23 16:18	02/23/23 12:37	1
Selenium	<0.0025		0.0025		mg/L		02/22/23 16:18	02/23/23 12:37	1
Thallium	<0.0020		0.0020		mg/L		02/22/23 16:18	02/23/23 12:37	1

Lab Sample ID: MB 500-699812/1-A
Matrix: Water
Analysis Batch: 699994

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 699812

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.0010		0.0010		mg/L		02/22/23 16:18	02/23/23 14:46	1

Lab Sample ID: LCS 500-699812/2-A
Matrix: Water
Analysis Batch: 699991

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 699812

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	2.00	2.07		mg/L		104	80 - 120
Beryllium	0.0500	0.0497		mg/L		99	80 - 120
Boron	1.00	0.968		mg/L		97	80 - 120
Cadmium	0.0500	0.0502		mg/L		100	80 - 120
Calcium	10.0	9.97		mg/L		100	80 - 120
Chromium	0.200	0.210		mg/L		105	80 - 120
Cobalt	0.500	0.529		mg/L		106	80 - 120
Lead	0.100	0.106		mg/L		106	80 - 120
Lithium	0.500	0.526		mg/L		105	80 - 120
Molybdenum	1.00	0.979		mg/L		98	80 - 120
Selenium	0.100	0.0992		mg/L		99	80 - 120
Thallium	0.100	0.107		mg/L		107	80 - 120

Lab Sample ID: LCS 500-699812/2-A
Matrix: Water
Analysis Batch: 699994

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 699812

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: 500-229775-1

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

Lab Sample ID: 500-229775-1 MS
Matrix: Water
Analysis Batch: 699991

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 699812

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS	Unit	D	%Rec	%Rec	
	Result			Result	Qualifier				Limits	Limits
Antimony	<0.0030		0.500	0.544		mg/L		109	75 - 125	
Barium	0.095		2.00	2.10		mg/L		100	75 - 125	
Beryllium	<0.0010		0.0500	0.0502		mg/L		100	75 - 125	
Boron	2.5		1.00	3.44		mg/L		98	75 - 125	
Cadmium	<0.00050		0.0500	0.0507		mg/L		101	75 - 125	
Calcium	110		10.0	117	4	mg/L		91	75 - 125	
Chromium	<0.0050		0.200	0.206		mg/L		103	75 - 125	
Cobalt	<0.0010		0.500	0.505		mg/L		101	75 - 125	
Lead	<0.00050		0.100	0.102		mg/L		102	75 - 125	
Lithium	<0.010		0.500	0.526		mg/L		104	75 - 125	
Molybdenum	<0.0050		1.00	1.02		mg/L		102	75 - 125	
Selenium	<0.0025		0.100	0.106		mg/L		104	75 - 125	
Thallium	<0.0020		0.100	0.104		mg/L		104	75 - 125	

Lab Sample ID: 500-229775-1 MS
Matrix: Water
Analysis Batch: 699994

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 699812

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS	Unit	D	%Rec	%Rec	
	Result			Result	Qualifier				Limits	Limits
Arsenic	<0.0010		0.100	0.101		mg/L		100	75 - 125	

Lab Sample ID: 500-229775-1 MSD
Matrix: Water
Analysis Batch: 699991

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 699812

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	0.539		mg/L		108	75 - 125	1	20	
Barium	0.095		2.00	2.11		mg/L		101	75 - 125	0	20	
Beryllium	<0.0010		0.0500	0.0497		mg/L		99	75 - 125	1	20	
Boron	2.5		1.00	3.42		mg/L		95	75 - 125	1	20	
Cadmium	<0.00050		0.0500	0.0500		mg/L		100	75 - 125	1	20	
Calcium	110		10.0	115	4	mg/L		73	75 - 125	2	20	
Chromium	<0.0050		0.200	0.205		mg/L		102	75 - 125	1	20	
Cobalt	<0.0010		0.500	0.502		mg/L		100	75 - 125	1	20	
Lead	<0.00050		0.100	0.103		mg/L		103	75 - 125	1	20	
Lithium	<0.010		0.500	0.527		mg/L		104	75 - 125	0	20	
Molybdenum	<0.0050		1.00	1.01		mg/L		101	75 - 125	1	20	
Selenium	<0.0025		0.100	0.104		mg/L		102	75 - 125	1	20	
Thallium	<0.0020		0.100	0.104		mg/L		104	75 - 125	0	20	

Lab Sample ID: 500-229775-1 MSD
Matrix: Water
Analysis Batch: 699994

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 699812

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result			Result	Qualifier				Limits	Limits	RPD	Limit
Arsenic	<0.0010		0.100	0.102		mg/L		101	75 - 125	0	20	

QC Sample Results

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

Job ID: 500-229775-1

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

Lab Sample ID: 500-229775-1 DU
Matrix: Water
Analysis Batch: 699991

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 699812

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	<0.0030		<0.0030		mg/L		NC	20
Barium	0.095		0.0968		mg/L		2	20
Beryllium	<0.0010		<0.0010		mg/L		NC	20
Boron	2.5		2.56		mg/L		4	20
Cadmium	<0.00050		<0.00050		mg/L		NC	20
Calcium	110		111		mg/L		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	<0.0050		<0.0050		mg/L		NC	20
Selenium	<0.0025		<0.0025		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Lab Sample ID: 500-229775-1 DU
Matrix: Water
Analysis Batch: 699994

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 699812

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Arsenic	<0.0010		<0.0010		mg/L		NC	20

Lab Sample ID: MB 500-700008/1-A
Matrix: Water
Analysis Batch: 700200

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 700008

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0030		0.0030		mg/L		02/23/23 16:26	02/24/23 11:53	1
Arsenic	<0.0010		0.0010		mg/L		02/23/23 16:26	02/24/23 11:53	1
Barium	<0.0025		0.0025		mg/L		02/23/23 16:26	02/24/23 11:53	1
Beryllium	<0.0010		0.0010		mg/L		02/23/23 16:26	02/24/23 11:53	1
Boron	<0.050		0.050		mg/L		02/23/23 16:26	02/24/23 11:53	1
Cadmium	<0.00050		0.00050		mg/L		02/23/23 16:26	02/24/23 11:53	1
Calcium	<0.20		0.20		mg/L		02/23/23 16:26	02/24/23 11:53	1
Chromium	<0.0050		0.0050		mg/L		02/23/23 16:26	02/24/23 11:53	1
Cobalt	<0.0010		0.0010		mg/L		02/23/23 16:26	02/24/23 11:53	1
Lead	<0.00050		0.00050		mg/L		02/23/23 16:26	02/24/23 11:53	1
Lithium	<0.010		0.010		mg/L		02/23/23 16:26	02/24/23 11:53	1
Molybdenum	<0.0050		0.0050		mg/L		02/23/23 16:26	02/24/23 11:53	1
Selenium	<0.0025		0.0025		mg/L		02/23/23 16:26	02/24/23 11:53	1
Thallium	<0.0020		0.0020		mg/L		02/23/23 16:26	02/24/23 11:53	1

Lab Sample ID: LCS 500-700008/2-A
Matrix: Water
Analysis Batch: 700200

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 700008

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.100	0.0951		mg/L		95	80 - 120
Barium	2.00	2.07		mg/L		103	80 - 120

Eurofins Chicago

QC Sample Results

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

Job ID: 500-229775-1

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

Lab Sample ID: LCS 500-700008/2-A
Matrix: Water
Analysis Batch: 700200

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 700008

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	0.0500	0.0503		mg/L		101	80 - 120
Boron	1.00	0.901		mg/L		90	80 - 120
Cadmium	0.0500	0.0491		mg/L		98	80 - 120
Calcium	10.0	9.68		mg/L		97	80 - 120
Chromium	0.200	0.206		mg/L		103	80 - 120
Cobalt	0.500	0.515		mg/L		103	80 - 120
Lead	0.100	0.104		mg/L		104	80 - 120
Lithium	0.500	0.491		mg/L		98	80 - 120
Molybdenum	1.00	0.972		mg/L		97	80 - 120
Selenium	0.100	0.0982		mg/L		98	80 - 120
Thallium	0.100	0.106		mg/L		106	80 - 120

Lab Sample ID: 500-229775-6 MS
Matrix: Water
Analysis Batch: 700200

Client Sample ID: MW-01
Prep Type: Total Recoverable
Prep Batch: 700008

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.0030		0.500	0.530		mg/L		106	75 - 125
Arsenic	<0.0010		0.100	0.0951		mg/L		95	75 - 125
Barium	0.082		2.00	2.12		mg/L		102	75 - 125
Beryllium	<0.0010		0.0500	0.0487		mg/L		97	75 - 125
Boron	0.46		1.00	1.36		mg/L		90	75 - 125
Cadmium	<0.00050		0.0500	0.0495		mg/L		99	75 - 125
Calcium	110		10.0	117	4	mg/L		87	75 - 125
Chromium	<0.0050		0.200	0.201		mg/L		101	75 - 125
Cobalt	<0.0010		0.500	0.494		mg/L		99	75 - 125
Lead	<0.00050		0.100	0.104		mg/L		104	75 - 125
Lithium	<0.010		0.500	0.486		mg/L		96	75 - 125
Molybdenum	<0.0050		1.00	1.00		mg/L		100	75 - 125
Selenium	<0.0025		0.100	0.103		mg/L		101	75 - 125
Thallium	<0.0020		0.100	0.105		mg/L		105	75 - 125

Lab Sample ID: 500-229775-6 MSD
Matrix: Water
Analysis Batch: 700200

Client Sample ID: MW-01
Prep Type: Total Recoverable
Prep Batch: 700008

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.0030		0.500	0.529		mg/L		106	75 - 125	0	20
Arsenic	<0.0010		0.100	0.0945		mg/L		94	75 - 125	1	20
Barium	0.082		2.00	2.10		mg/L		101	75 - 125	1	20
Beryllium	<0.0010		0.0500	0.0476		mg/L		95	75 - 125	2	20
Boron	0.46		1.00	1.35		mg/L		89	75 - 125	0	20
Cadmium	<0.00050		0.0500	0.0498		mg/L		100	75 - 125	1	20
Calcium	110		10.0	115	4	mg/L		69	75 - 125	1	20
Chromium	<0.0050		0.200	0.200		mg/L		100	75 - 125	0	20
Cobalt	<0.0010		0.500	0.495		mg/L		99	75 - 125	0	20
Lead	<0.00050		0.100	0.102		mg/L		102	75 - 125	1	20
Lithium	<0.010		0.500	0.477		mg/L		94	75 - 125	2	20
Molybdenum	<0.0050		1.00	1.00		mg/L		100	75 - 125	0	20

Eurofins Chicago

QC Sample Results

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

Job ID: 500-229775-1

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

Lab Sample ID: 500-229775-6 MSD
Matrix: Water
Analysis Batch: 700200

Client Sample ID: MW-01
Prep Type: Total Recoverable
Prep Batch: 700008

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	<0.0025		0.100	0.102		mg/L		99	75 - 125	2	20
Thallium	<0.0020		0.100	0.104		mg/L		104	75 - 125	1	20

Lab Sample ID: 500-229775-6 DU
Matrix: Water
Analysis Batch: 700200

Client Sample ID: MW-01
Prep Type: Total Recoverable
Prep Batch: 700008

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	0.082		0.0789		mg/L		3	20
Beryllium	<0.0010		<0.0010		mg/L		NC	20
Boron	0.46		0.444		mg/L		3	20
Cadmium	<0.00050		<0.00050		mg/L		NC	20
Calcium	110		106		mg/L		2	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	<0.0025		<0.0025		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-700891/12-A
Matrix: Water
Analysis Batch: 701104

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 700891

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/02/23 11:45	03/03/23 09:32	1

Lab Sample ID: LCS 500-700891/13-A
Matrix: Water
Analysis Batch: 701104

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 700891

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00198	0.00188		mg/L		95	80 - 120

Lab Sample ID: 500-229775-5 MS
Matrix: Water
Analysis Batch: 701104

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 700891

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

QC Sample Results

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

Job ID: 500-229775-1

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

Lab Sample ID: 500-229775-5 MSD
Matrix: Water
Analysis Batch: 701104

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 700891

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.00020		0.00100	0.00104		mg/L		104	75 - 125	2	20

Lab Sample ID: 500-229775-5 DU
Matrix: Water
Analysis Batch: 701104

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 700891

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 500-699823/1
Matrix: Water
Analysis Batch: 699823

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			02/23/23 03:29	1

Lab Sample ID: LCS 500-699823/2
Matrix: Water
Analysis Batch: 699823

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	276		mg/L		110	80 - 120

Lab Sample ID: MB 500-700037/1
Matrix: Water
Analysis Batch: 700037

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			02/24/23 01:46	1

Lab Sample ID: LCS 500-700037/2
Matrix: Water
Analysis Batch: 700037

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	252		mg/L		101	80 - 120

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-700503/16
Matrix: Water
Analysis Batch: 700503

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			02/28/23 10:51	1

Euofins Chicago

QC Sample Results

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

Job ID: 500-229775-1

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

Lab Sample ID: LCS 500-700503/17
Matrix: Water
Analysis Batch: 700503

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

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-699977/3
Matrix: Water
Analysis Batch: 699977

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			02/23/23 13:49	1

Lab Sample ID: LCS 500-699977/4
Matrix: Water
Analysis Batch: 699977

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

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

Lab Sample ID: MB 500-700591/3
Matrix: Water
Analysis Batch: 700591

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			02/28/23 14:13	1

Lab Sample ID: LCS 500-700591/4
Matrix: Water
Analysis Batch: 700591

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

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

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-700520/16
Matrix: Water
Analysis Batch: 700520

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			02/28/23 12:14	1

Lab Sample ID: LCS 500-700520/17
Matrix: Water
Analysis Batch: 700520

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	21.6		mg/L		108	88 - 123

Eurofins Chicago

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



Chain of Custody Record



500-229775 COC

Client Information		Sampler: <u>Kaelyn Sperle</u>	Lab PM: <u>Mockler Diana J</u>	Carrier Tracking No(s):	COC No: <u>500-106664-44025 1</u>
Client Contact: <u>Kaelyn Sperle</u>		Phone: <u>262-278-1621</u>	E-Mail: <u>Diana.Mockler@et.eurofins.com</u>	State of Origin: <u>IL</u>	Page: <u>Page 1 of 1</u>

Company: <u>KPRG and Associates Inc.</u>	PWSID:	Analysis Requested	Job #: <u>500-229775</u>
--	--------	---------------------------	--------------------------

Address: <u>14665 West Lisbon Road, Suite 1A</u>	Due Date Requested: <u>Standard</u>	Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 903.0 - Standard Target List Ra226Ra228_GPPC - Local Method 904.0 - Standard Target List 6020A, 7470A 2540C, 4500_F_C, SM4500_CL_E, SM4500_SO4_E	Preservation Codes A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)
City: <u>Brookfield</u>	TAT Requested (days): <u>Standard</u>		
State, Zip: <u>WI 53005</u>	Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		
Phone: <u>262-781-0475(Tel)</u>	PO #: <u>4502081030</u>		
Email: <u>Kaelyn.Sperle@kprg.com</u>	WO #:		
Project Name: <u>Powerton CCR FAB</u>	Project #: <u>50011612</u>	Total Number of containers	Other:
Site: <u>Illinois</u>	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0 - Standard Target List	Ra226Ra228_GPPC - Local Method	904.0 - Standard Target List	6020A, 7470A	2540C, 4500_F_C, SM4500_CL_E, SM4500_SO4_E	Total Number of containers	Special Instructions/Note
1 MW-02	2/21/23	0815	G	Water	N	N	X	X	X	X	X		
2 MW-03	2/21/23	0927		Water	N	N	X	X	X	X	X		
3 MW-04	2/21/23	1037		Water	N	N	X	X	X	X	X		
4 MW-05	2/21/23	1136		Water	N	N	X	X	X	X	X		
5 Duplicate	2/21/23	-		Water	N	N	X	X	X	X	X		
				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>2/21/23/1700</u>	Company: <u>KPRG</u>	Received by: <u>FedEx</u>
Relinquished by:	Date/Time:	Company:	Received by:
Relinquished by:	Date/Time:	Company:	Received by: <u>[Signature]</u>

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: <u>2671.4, 2571.5</u>
--	-----------------	---

Do Not Use This Tag

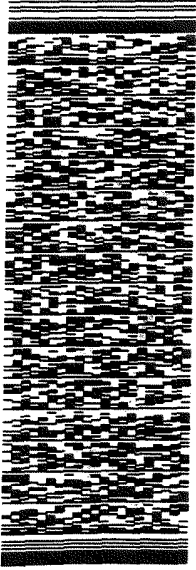
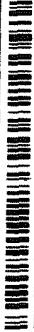
ORIGIN ID:PIAA (262) 278-1621
KAE LIN SPERLE
KPRG AND ASSOCIATES
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US

ACTWGT: 40.90 LB
CAD: 6994780/SSFE2401
DIMS: 24x13x14 IN
BILL THIRD PARTY

TO EUROFINS CHICAGO
EUROFINS CHICAGO
2417 BOND ST

UNIVERSITY PARK IL 60484

(709) 594-5200 REF:
YAU: DEPT:



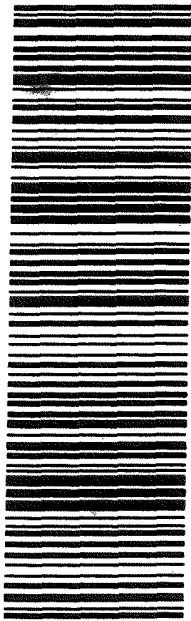
REL# 3786346

4 of 5
MPS# 3948 9886 1794
0201
Mstr# 3948 9886 1761

WED - 22 FEB 10:30A
PRIORITY OVERNIGHT

XN JOTA

AHS
60484
IL-US ORD



RT 519 5 10:30 A
ST 7 1794 02:22

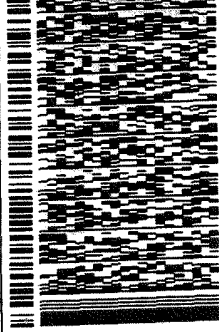
ORIGIN ID:PIAA (262) 278-1621
KAE LIN SPERLE
KPRG AND ASSOCIATES
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 21FEB23
ACTWGT: 40.90 LB
CAD: 6994780/SSFE2401
DIMS: 24x13x14 IN
BILL THIRD PARTY

TO EUROFINS CHICAGO
EUROFINS CHICAGO
2417 BOND ST

UNIVERSITY PARK IL 60484

(709) 594-5200 REF:
YAU: DEPT:



FedEx
Express



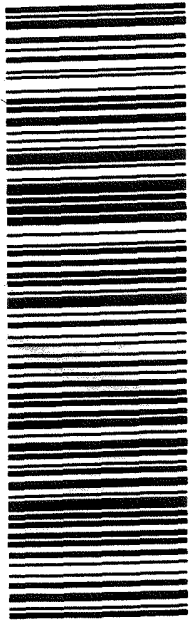
REL# 3786346

1 of 5
TRK# 3948 9886 1761
0201
MASTER

WED - 22 FEB 10:30
PRIORITY OVERNIGHT

XN JOTA

AH
6048
IL-US OR



RT 519 5 10:30 A
ST 7 1761 02:22



500-229775 Waybi

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

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-229775-1

Login Number: 229775

List Number: 1

Creator: James, Jeff A

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6,1.5,-0.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (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: 500-229775-1

Client Sample ID: MW-02
Date Collected: 02/21/23 08:15
Date Received: 02/22/23 09:55

Lab Sample ID: 500-229775-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 ¹
Total Recoverable	Analysis	6020A		1	699991	FXG	EET CHI	02/23/23 12:44
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 ¹
Total Recoverable	Analysis	6020A		1	699994	FXG	EET CHI	02/23/23 14:53
Total/NA	Prep	7470A			700891	MJG	EET CHI	03/02/23 11:45 - 03/02/23 13:45 ¹
Total/NA	Analysis	7470A		1	701104	MJG	EET CHI	03/03/23 09:38
Total/NA	Analysis	SM 2540C		1	699823	CLB	EET CHI	02/23/23 04:10
Total/NA	Analysis	SM 4500 CI- E		5	700503	LP	EET CHI	02/28/23 10:53
Total/NA	Analysis	SM 4500 F C		1	699977	EH	EET CHI	02/23/23 13:49
Total/NA	Analysis	SM 4500 SO4 E		5	700520	LP	EET CHI	02/28/23 12:19

Client Sample ID: MW-03
Date Collected: 02/21/23 09:27
Date Received: 02/22/23 09:55

Lab Sample ID: 500-229775-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 ¹
Total Recoverable	Analysis	6020A		1	699991	FXG	EET CHI	02/23/23 13:02
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 ¹
Total Recoverable	Analysis	6020A		1	699994	FXG	EET CHI	02/23/23 15:10
Total/NA	Prep	7470A			700891	MJG	EET CHI	03/02/23 11:45 - 03/02/23 13:45 ¹
Total/NA	Analysis	7470A		1	701104	MJG	EET CHI	03/03/23 09:40
Total/NA	Analysis	SM 2540C		1	699823	CLB	EET CHI	02/23/23 04:12
Total/NA	Analysis	SM 4500 CI- E		5	700503	LP	EET CHI	02/28/23 10:53
Total/NA	Analysis	SM 4500 F C		1	699977	EH	EET CHI	02/23/23 13:49
Total/NA	Analysis	SM 4500 SO4 E		5	700520	LP	EET CHI	02/28/23 12:20

Client Sample ID: MW-04
Date Collected: 02/21/23 10:37
Date Received: 02/22/23 09:55

Lab Sample ID: 500-229775-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 ¹
Total Recoverable	Analysis	6020A		1	699991	FXG	EET CHI	02/23/23 13:05
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 ¹
Total Recoverable	Analysis	6020A		1	699994	FXG	EET CHI	02/23/23 15:14
Total/NA	Prep	7470A			700891	MJG	EET CHI	03/02/23 11:45 - 03/02/23 13:45 ¹
Total/NA	Analysis	7470A		1	701104	MJG	EET CHI	03/03/23 09:42
Total/NA	Analysis	SM 2540C		1	699823	CLB	EET CHI	02/23/23 04:15
Total/NA	Analysis	SM 4500 CI- E		5	700503	LP	EET CHI	02/28/23 10:54
Total/NA	Analysis	SM 4500 F C		1	699977	EH	EET CHI	02/23/23 13:49
Total/NA	Analysis	SM 4500 SO4 E		5	700520	LP	EET CHI	02/28/23 12:20

Lab Chronicle

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

Job ID: 500-229775-1

Client Sample ID: MW-05
Date Collected: 02/21/23 11:36
Date Received: 02/22/23 09:55

Lab Sample ID: 500-229775-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 ¹
Total Recoverable	Analysis	6020A		1	699991	FXG	EET CHI	02/23/23 13:08
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 ¹
Total Recoverable	Analysis	6020A		1	699994	FXG	EET CHI	02/23/23 15:17
Total/NA	Prep	7470A			700891	MJG	EET CHI	03/02/23 11:45 - 03/02/23 13:45 ¹
Total/NA	Analysis	7470A		1	701104	MJG	EET CHI	03/03/23 09:44
Total/NA	Analysis	SM 2540C		1	699823	CLB	EET CHI	02/23/23 04:18
Total/NA	Analysis	SM 4500 Cl- E		5	700503	LP	EET CHI	02/28/23 10:54
Total/NA	Analysis	SM 4500 F C		1	699977	EH	EET CHI	02/23/23 13:49
Total/NA	Analysis	SM 4500 SO4 E		5	700520	LP	EET CHI	02/28/23 12:21

Client Sample ID: Duplicate
Date Collected: 02/21/23 00:00
Date Received: 02/22/23 09:55

Lab Sample ID: 500-229775-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 ¹
Total Recoverable	Analysis	6020A		1	699991	FXG	EET CHI	02/23/23 13:20
Total Recoverable	Prep	3005A			699812	RN	EET CHI	02/22/23 16:18 - 02/22/23 16:48 ¹
Total Recoverable	Analysis	6020A		1	699994	FXG	EET CHI	02/23/23 15:27
Total/NA	Prep	7470A			700891	MJG	EET CHI	03/02/23 11:45 - 03/02/23 13:45 ¹
Total/NA	Analysis	7470A		1	701104	MJG	EET CHI	03/03/23 09:46
Total/NA	Analysis	SM 2540C		1	699823	CLB	EET CHI	02/23/23 04:20
Total/NA	Analysis	SM 4500 Cl- E		5	700503	LP	EET CHI	02/28/23 10:54
Total/NA	Analysis	SM 4500 F C		1	699977	EH	EET CHI	02/23/23 13:49
Total/NA	Analysis	SM 4500 SO4 E		5	700520	LP	EET CHI	02/28/23 12:21

Client Sample ID: MW-01
Date Collected: 02/22/23 10:22
Date Received: 02/23/23 09:50

Lab Sample ID: 500-229775-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			700008	RN	EET CHI	02/23/23 16:26 - 02/23/23 16:56 ¹
Total Recoverable	Analysis	6020A		1	700200	FXG	EET CHI	02/24/23 12:00
Total/NA	Prep	7470A			700891	MJG	EET CHI	03/02/23 11:45 - 03/02/23 13:45 ¹
Total/NA	Analysis	7470A		1	701104	MJG	EET CHI	03/03/23 10:17
Total/NA	Analysis	SM 2540C		1	700037	CLB	EET CHI	02/24/23 02:06
Total/NA	Analysis	SM 4500 Cl- E		5	700503	LP	EET CHI	02/28/23 10:54
Total/NA	Analysis	SM 4500 F C		1	700591	EH	EET CHI	02/28/23 14:13
Total/NA	Analysis	SM 4500 SO4 E		5	700520	LP	EET CHI	02/28/23 12:22

Lab Chronicle

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

Job ID: 500-229775-1

Client Sample ID: MW-10

Lab Sample ID: 500-229775-7

Date Collected: 02/22/23 09:27

Matrix: Water

Date Received: 02/23/23 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			700008	RN	EET CHI	02/23/23 16:26 - 02/23/23 16:56 ¹
Total Recoverable	Analysis	6020A		1	700200	FXG	EET CHI	02/24/23 12:17
Total/NA	Prep	7470A			700891	MJG	EET CHI	03/02/23 11:45 - 03/02/23 13:45 ¹
Total/NA	Analysis	7470A		1	701104	MJG	EET CHI	03/03/23 10:19
Total/NA	Analysis	SM 2540C		1	700037	CLB	EET CHI	02/24/23 02:09
Total/NA	Analysis	SM 4500 Cl- E		5	700503	LP	EET CHI	02/28/23 10:55
Total/NA	Analysis	SM 4500 F C		1	700591	EH	EET CHI	02/28/23 14:13
Total/NA	Analysis	SM 4500 SO4 E		5	700520	LP	EET CHI	02/28/23 12:36

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: 500-229775-1

Laboratory: Eurofins Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-29-23

1

2

3

4

5

6

7

8

9

10

11

12

13

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

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

Generated 3/24/2023 9:05:34 AM

JOB DESCRIPTION

Powerton CCR FAB (RAD)

JOB NUMBER

500-229775-2

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



Generated
3/24/2023 9:05:34 AM

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



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	14
QC Association	15
QC Sample Results	16
Chain of Custody	19
Receipt Checklists	25
Chronicle	28
Certification Summary	30
Tracer Carrier Summary	31

Case Narrative

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

Job ID: 500-229775-2

Job ID: 500-229775-2

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-229775-2

Comments

No additional comments.

Receipt

The samples were received on 2/22/2023 9:55 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were -0.3° C, 1.5° C and 1.6° C.

RAD

Method 903.0: Radium-226 batch 601827

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 (500-229775-6), MW-10 (500-229775-7), (LCS 160-601827/2-A), (MB 160-601827/1-A), (500-229829-E-11-A) and (500-229829-C-11-A DU)

Methods 903.0, 9315: Radium-226 batch 601677

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

MW-02 (500-229775-1), MW-03 (500-229775-2), MW-04 (500-229775-3), MW-05 (500-229775-4), Duplicate (500-229775-5), (LCS 160-601677/2-A), (MB 160-601677/1-A) and (500-229775-C-1-A DU). Methods 904.0, 9320: Radium-228 prep batch 160-601682:

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

MW-02 (500-229775-1), MW-03 (500-229775-2), MW-04 (500-229775-3), MW-05 (500-229775-4), Duplicate (500-229775-5), (LCS 160-601682/2-A), (MB 160-601682/1-A) and (500-229775-C-1-B DU)

Method 904.0: Radium-228 batch 601828

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 (500-229775-6), MW-10 (500-229775-7), (LCS 160-601828/2-A), (MB 160-601828/1-A), (500-229829-E-11-B) and (500-229829-C-11-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: 500-229775-2

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: 500-229775-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-229775-1	MW-02	Water	02/21/23 08:15	02/22/23 09:55
500-229775-2	MW-03	Water	02/21/23 09:27	02/22/23 09:55
500-229775-3	MW-04	Water	02/21/23 10:37	02/22/23 09:55
500-229775-4	MW-05	Water	02/21/23 11:36	02/22/23 09:55
500-229775-5	Duplicate	Water	02/21/23 00:00	02/22/23 09:55
500-229775-6	MW-01	Water	02/22/23 10:22	02/23/23 09:50
500-229775-7	MW-10	Water	02/22/23 09:27	02/23/23 09:50

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

Client Sample Results

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

Job ID: 500-229775-2

Client Sample ID: MW-02

Lab Sample ID: 500-229775-1

Date Collected: 02/21/23 08:15

Matrix: Water

Date Received: 02/22/23 09:55

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	0.0454	U	0.0575	0.0576	1.00	0.0953	pCi/L	02/27/23 10:06	03/21/23 21:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.7		30 - 110					02/27/23 10:06	03/21/23 21:21	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	0.208	U	0.331	0.332	1.00	0.563	pCi/L	02/27/23 10:24	03/07/23 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.7		30 - 110					02/27/23 10:24	03/07/23 12:07	1
Y Carrier	85.6		30 - 110					02/27/23 10:24	03/07/23 12:07	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	0.253	U	0.336	0.337	5.00	0.563	pCi/L		03/23/23 12:09	1

Client Sample Results

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

Job ID: 500-229775-2

Client Sample ID: MW-03

Lab Sample ID: 500-229775-2

Date Collected: 02/21/23 09:27

Matrix: Water

Date Received: 02/22/23 09:55

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	0.0129	U	0.0424	0.0424	1.00	0.0823	pCi/L	02/27/23 10:06	03/22/23 07:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					02/27/23 10:06	03/22/23 07:40	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	0.241	U	0.298	0.298	1.00	0.493	pCi/L	02/27/23 10:24	03/07/23 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					02/27/23 10:24	03/07/23 12:08	1
Y Carrier	85.2		30 - 110					02/27/23 10:24	03/07/23 12:08	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	0.254	U	0.301	0.301	5.00	0.493	pCi/L		03/23/23 12:09	1

Client Sample Results

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

Job ID: 500-229775-2

Client Sample ID: MW-04

Lab Sample ID: 500-229775-3

Date Collected: 02/21/23 10:37

Matrix: Water

Date Received: 02/22/23 09:55

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	0.0415	U	0.0749	0.0750	1.00	0.130	pCi/L	02/27/23 10:06	03/22/23 07:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		30 - 110					02/27/23 10:06	03/22/23 07:40	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	0.257	U	0.340	0.340	1.00	0.567	pCi/L	02/27/23 10:24	03/07/23 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		30 - 110					02/27/23 10:24	03/07/23 12:08	1
Y Carrier	80.7		30 - 110					02/27/23 10:24	03/07/23 12:08	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	0.299	U	0.348	0.348	5.00	0.567	pCi/L		03/23/23 12:09	1

Client Sample Results

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

Job ID: 500-229775-2

Client Sample ID: MW-05

Lab Sample ID: 500-229775-4

Date Collected: 02/21/23 11:36

Matrix: Water

Date Received: 02/22/23 09:55

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	-0.0164	U	0.0502	0.0502	1.00	0.109	pCi/L	02/27/23 10:06	03/22/23 07:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		30 - 110					02/27/23 10:06	03/22/23 07:40	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	0.359	U	0.332	0.334	1.00	0.528	pCi/L	02/27/23 10:24	03/07/23 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		30 - 110					02/27/23 10:24	03/07/23 12:08	1
Y Carrier	86.0		30 - 110					02/27/23 10:24	03/07/23 12:08	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	0.342	U	0.336	0.338	5.00	0.528	pCi/L		03/23/23 12:09	1

Client Sample Results

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

Job ID: 500-229775-2

Client Sample ID: Duplicate

Lab Sample ID: 500-229775-5

Date Collected: 02/21/23 00:00

Matrix: Water

Date Received: 02/22/23 09:55

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	0.0447	U	0.0571	0.0572	1.00	0.0944	pCi/L	02/27/23 10:06	03/22/23 07:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.6		30 - 110					02/27/23 10:06	03/22/23 07:45	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	0.180	U	0.381	0.381	1.00	0.669	pCi/L	02/27/23 10:24	03/07/23 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.6		30 - 110					02/27/23 10:24	03/07/23 12:08	1
Y Carrier	78.1		30 - 110					02/27/23 10:24	03/07/23 12:08	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	0.225	U	0.385	0.385	5.00	0.669	pCi/L		03/23/23 12:09	1

Client Sample Results

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

Job ID: 500-229775-2

Client Sample ID: MW-01

Lab Sample ID: 500-229775-6

Date Collected: 02/22/23 10:22

Matrix: Water

Date Received: 02/23/23 09:50

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0894	U	0.0707	0.0712	1.00	0.104	pCi/L	02/28/23 09:01	03/22/23 20:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		30 - 110					02/28/23 09:01	03/22/23 20:50	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.333	U	0.315	0.317	1.00	0.503	pCi/L	02/28/23 09:47	03/08/23 12:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		30 - 110					02/28/23 09:47	03/08/23 12:00	1
Y Carrier	87.5		30 - 110					02/28/23 09:47	03/08/23 12:00	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.422	U	0.323	0.325	5.00	0.503	pCi/L		03/23/23 16:56	1

Client Sample Results

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

Job ID: 500-229775-2

Client Sample ID: MW-10

Lab Sample ID: 500-229775-7

Date Collected: 02/22/23 09:27

Matrix: Water

Date Received: 02/23/23 09:50

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.315		0.111	0.114	1.00	0.105	pCi/L	02/28/23 09:01	03/22/23 20:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.3		30 - 110					02/28/23 09:01	03/22/23 20:50	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.438	U	0.386	0.388	1.00	0.608	pCi/L	02/28/23 09:47	03/08/23 12:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.3		30 - 110					02/28/23 09:47	03/08/23 12:01	1
Y Carrier	86.0		30 - 110					02/28/23 09:47	03/08/23 12:01	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	0.753		0.402	0.404	5.00	0.608	pCi/L		03/23/23 16:56	1

Definitions/Glossary

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

Job ID: 500-229775-2

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: 500-229775-2

Rad

Prep Batch: 601677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total/NA	Water	PrecSep-21	
500-229775-2	MW-03	Total/NA	Water	PrecSep-21	
500-229775-3	MW-04	Total/NA	Water	PrecSep-21	
500-229775-4	MW-05	Total/NA	Water	PrecSep-21	
500-229775-5	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-601677/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-601677/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-229775-1 DU	MW-02	Total/NA	Water	PrecSep-21	

Prep Batch: 601682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-1	MW-02	Total/NA	Water	PrecSep_0	
500-229775-2	MW-03	Total/NA	Water	PrecSep_0	
500-229775-3	MW-04	Total/NA	Water	PrecSep_0	
500-229775-4	MW-05	Total/NA	Water	PrecSep_0	
500-229775-5	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-601682/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-601682/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-229775-1 DU	MW-02	Total/NA	Water	PrecSep_0	

Prep Batch: 601827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-6	MW-01	Total/NA	Water	PrecSep-21	
500-229775-7	MW-10	Total/NA	Water	PrecSep-21	
MB 160-601827/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-601827/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 601828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-229775-6	MW-01	Total/NA	Water	PrecSep_0	
500-229775-7	MW-10	Total/NA	Water	PrecSep_0	
MB 160-601828/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-601828/2-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: 500-229775-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-601677/1-A
Matrix: Water
Analysis Batch: 604475

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 601677

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.03437	U	0.0519	0.0520	1.00	0.119	pCi/L	02/27/23 10:06	03/21/23 19:11	1
Carrier	MB		Limits							
Ba Carrier	%Yield	MB Qualifier	30 - 110							
	92.9									
								Prepared	Analyzed	Dil Fac
								02/27/23 10:06	03/21/23 19:11	1

Lab Sample ID: LCS 160-601677/2-A
Matrix: Water
Analysis Batch: 604475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 601677

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits	
				Uncert. (2σ+/-)						
Radium-226	11.3	12.32		1.25	1.00	0.0902	pCi/L	109	75 - 125	
Carrier	LCS	LCS								
Ba Carrier	%Yield	Qualifier	Limits							
	91.5		30 - 110							

Lab Sample ID: 500-229775-1 DU
Matrix: Water
Analysis Batch: 604712

Client Sample ID: MW-02
Prep Type: Total/NA
Prep Batch: 601677

Analyte	Sample		DU		Total	RL	MDC	Unit	RER	RER Limit	
	Result	Sample Qual	Result	DU Qual	Uncert. (2σ+/-)						
Radium-226	0.0454	U	0.05702	U	0.0551	1.00	0.0835	pCi/L	0.10	1	
Carrier	DU	DU									
Ba Carrier	%Yield	Qualifier	Limits								
	87.6		30 - 110								

Lab Sample ID: MB 160-601827/1-A
Matrix: Water
Analysis Batch: 604715

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 601827

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.008821	U	0.0567	0.0567	1.00	0.110	pCi/L	02/28/23 09:01	03/22/23 10:18	1
Carrier	MB		Limits							
Ba Carrier	%Yield	MB Qualifier	30 - 110							
	89.5									
								Prepared	Analyzed	Dil Fac
								02/28/23 09:01	03/22/23 10:18	1

Lab Sample ID: LCS 160-601827/2-A
Matrix: Water
Analysis Batch: 604715

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 601827

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	12.40		1.26	1.00	0.107	pCi/L	109	75 - 125

Euromins Chicago

QC Sample Results

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

Job ID: 500-229775-2

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

Lab Sample ID: LCS 160-601827/2-A
Matrix: Water
Analysis Batch: 604715

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 601827

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	88.4		30 - 110

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-601682/1-A
Matrix: Water
Analysis Batch: 602704

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 601682

Analyte	MB MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	-0.01265	U	0.269	0.269	1.00	0.509	pCi/L	02/27/23 10:24	03/07/23 12:04	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	92.9		30 - 110		02/27/23 10:24	03/07/23 12:04	1			
Y Carrier	87.1		30 - 110		02/27/23 10:24	03/07/23 12:04	1			

Lab Sample ID: LCS 160-601682/2-A
Matrix: Water
Analysis Batch: 602704

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 601682

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
									%Rec	Limits
Radium-228	8.14	9.091		1.24	1.00	0.460	pCi/L	112	75 - 125	
Carrier	LCS %Yield	LCS Qualifier	Limits							
Ba Carrier	91.5		30 - 110							
Y Carrier	84.1		30 - 110							

Lab Sample ID: 500-229775-1 DU
Matrix: Water
Analysis Batch: 602703

Client Sample ID: MW-02
Prep Type: Total/NA
Prep Batch: 601682

Analyte	Sample Sample		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
	Result	Qual								RER
Radium-228	0.208	U	0.2482	U	0.328	1.00	0.547	pCi/L	0.06	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	87.6		30 - 110							
Y Carrier	83.4		30 - 110							

Lab Sample ID: MB 160-601828/1-A
Matrix: Water
Analysis Batch: 602826

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 601828

Analyte	MB MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.1520	U	0.310	0.310	1.00	0.540	pCi/L	02/28/23 09:47	03/08/23 12:08	1

Eurofins Chicago

QC Sample Results

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

Job ID: 500-229775-2

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

Lab Sample ID: MB 160-601828/1-A
Matrix: Water
Analysis Batch: 602826

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 601828

Carrier	MB MB		Limits
	%Yield	Qualifier	
Ba Carrier	89.5		30 - 110
Y Carrier	83.7		30 - 110

Prepared	Analyzed	Dil Fac
02/28/23 09:47	03/08/23 12:08	1
02/28/23 09:47	03/08/23 12:08	1

Lab Sample ID: LCS 160-601828/2-A
Matrix: Water
Analysis Batch: 602861

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 601828

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec
									Limits
Radium-228	8.13	9.861		1.32	1.00	0.512	pCi/L	121	75 - 125

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	88.4		30 - 110
Y Carrier	85.2		30 - 110

Eurofins Chicago

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

**Chain of Custody Record**

eurofins

500-229775 COC

Client Information			Sampler Kaelyn Sperle	Lab PM Mockler Diana J	Carrier Tracking No(s)	COC No: 500-106664-44025 1									
Client Contact: Kaelyn Sperle			Phone: 262-278-1621	E-Mail Diana.Mockler@et.eurofins.com	State of Origin IL	Page: Page 1 of 1									
Company KPRG and Associates Inc.			PWSID	Analysis Requested		Job #: 500-229775									
Address: 14665 West Lisbon Road, Suite 1A			Due Date Requested Standard	Field Filtered Sample (Yes or No)		Preservation Codes A - HCL M Hexane B - NaOH N None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Trizma Z - other (specify)									
City Brookfield			TAT Requested (days) Standard	Perform MS/MSD (Yes or No)											
State, Zip WI 53005			Compliance Project: Δ Yes Δ No	903.0 - Standard Target List											
Phone: 262-781-0475(Tel)			PO #: 4502081030	Raz26Ra228_GPPC - Local Method											
Email: kaelyns@kprg.com			WO #:	904.0 - Standard Target List											
Project Name: Powerton CCR FAB			Project #: 50011612	6020A, 7470A		Total Number of containers									
Site: Illinois			SSOW#:	2540C, 4500_F_C, SM4500_CL_E, SM4500_SO4_E											
Sample Identification			Sample Date	Sample Time	Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)								
					Preservation Code										
1	MW-02	2/21/23	0815	G	Water	N	N	X	X	X	X	X			
2	MW-03	2/21/23	0927		Water										
3	MW-04	2/21/23	1037		Water										
4	MW-05	2/21/23	1136		Water										
5	Duplicate	2/21/23	-		Water	N	N	X	X	X	X	X			
					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 Kaelyn Sperle			Date/Time: 2/21/23/1700	Company KPRG	Received by FedEx										
Relinquished by			Date/Time:	Company	Received by										
Relinquished by			Date/Time:	Company	Received by [Signature]										
Custody Seals Intact: Δ Yes Δ No			Custody Seal No			Cooler Temperature(s) °C and Other Remarks: 2671.4, 2571.5									

Eurofins Chicago

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

Chain of Custody Record



eurofins

Client Information Client Contact: <u>Mitchel Dolan</u> Phone: <u>262-278-1621</u> Company: <u>KPRG and Associates, Inc</u> Address: <u>14665 West Lisbon Road, Suite 1A</u> City: <u>Brookfield</u> State, Zip: <u>WI, 53005</u> Phone: <u>262-781-0475(Tel)</u> Email: <u>mitcheld@kprginc.com</u> Project Name: <u>Poweron CCR FAB</u> Site: <u>Illinois</u>				Sampler: <u>Kaelyn Sperte</u> Lab PM: <u>Mockler Diana J</u> E-Mail: <u>Diana.Mockler@et.eurofins.com</u> State or City: <u>IL</u> COC No.: <u>500-106664-44025 1</u> Page: <u>Page 1 of 1</u> Job #: <u>500-229775</u>			Preservation Codes A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Trizma Z - other (specify)							
Due Date Requested: <u>Standard</u> TAT Requested (days): <u>Standard</u> Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: <u>4502081030</u> Project #: <u>50011612</u> SSOW#: _____				Analysis Requested										
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)		Total Number of Containers		Special Instructions/Note								
Preservation Code		903.0 - Standard Target List R226Ra228_CFP - Local Method 904.0 - Standard Target List 6020A, 7470A 2540C, 4500_F_C, SM4500_CL_E, SM4500_S04_E		Analysis Results Columns (D, N, X)										
<u>Mw-01</u> <u>Mw-10</u>		<u>2/22/23 1022</u> <u>2/23/23 0927</u>		<u>G</u> <u>↓</u>				<u>Water</u> <u>Water</u> <u>Water</u> <u>Water</u> <u>Water</u> <u>Water</u> <u>Water</u>		<u>N</u> <u>N</u> <u>X</u> <u>X</u> <u>X</u> <u>X</u> <u>X</u>		(X marks in result columns)		
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months										
Deliverable Requested I, II III IV, Other (specify) _____				Special Instructions/QC Requirements _____										
Empty Kit Relinquished by: <u>Kaelyn Sperte</u> Relinquished by: _____ Relinquished by: _____		Date: <u>2/22/23/1645</u> Date/Time: _____ Date/Time: _____		Company: <u>KPRG</u> Company: _____ Company: _____			Time: _____ Method of Shipment: _____		Received by: <u>FedEx</u> Received by: <u>[Signature]</u> Received by: _____		Date/Time: <u>2/22/23/1645</u> Date/Time: _____ Date/Time: <u>2/23/23 0950</u> Date/Time: _____		Company: <u>FedEx</u> Company: _____ Company: <u>EETA</u> Company: _____	
Custody Seals Intact. <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No _____		Cooler Temperature(s) °C and Other Remarks: <u>-0.1 + -0.3</u>										

Do Not Use This Tag

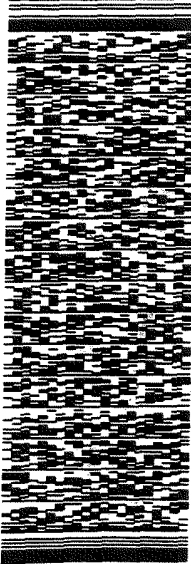
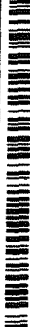
ORIGIN ID:PIAA (262) 278-1621
KAE LIN SPERLE
KPRG AND ASSOCIATES
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US

ACTWGT: 40.90 LB
CAD: 6994780/SSFE2401
DIMS: 24x13x14 IN
BILL THIRD PARTY

TO EUROFINS CHICAGO
EUROFINS CHICAGO
2417 BOND ST

UNIVERSITY PARK IL 60484

(709) 594-5200 REF:
YAU: PDI: DEPT:



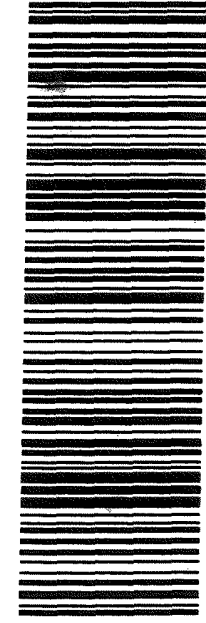
REL# 3786346

4 of 5
MPS# 3948 9886 1794
0201
Mstr# 3948 9886 1761

WED - 22 FEB 10:30A
PRIORITY OVERNIGHT
AHS

XN JOTA

60484
IL-US ORD



RT 519
ST 7

5 10:30
A 1794
02:22

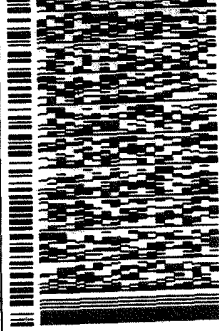
ORIGIN ID:PIAA (262) 278-1621
KAE LIN SPERLE
KPRG AND ASSOCIATES
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 21FEB23
ACTWGT: 40.90 LB
CAD: 6994780/SSFE2401
DIMS: 24x13x14 IN

TO EUROFINS CHICAGO
EUROFINS CHICAGO
2417 BOND ST

UNIVERSITY PARK IL 60484

(709) 594-5200 REF:
YAU: PDI: DEPT:



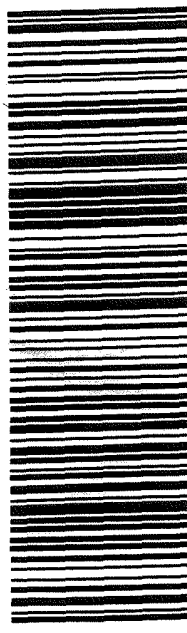
REL# 3786346

1 of 5
TRK# 3948 9886 1761
0201
MASTER

WED - 22 FEB 10:30
PRIORITY OVERNIGHT
AH

XN JOTA

6048
IL-US OR



RT 519
ST 7

5 10:30
A 1761
02:22

500-229775 Waybi



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

ORIGIN ID:PIAA (262) 278-1621
KAELYN SPERLE
KPRG AND ASSOCIATES
414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 22FEB23
ACTWGT: 42.80 LB
CAD: 6994780/SSFE2401
DIMS: 24x14x14 IN

BILL THIRD PARTY

Part # 1562362136308210788XP 09/23

24QT



500 229775 Waybi

TO **EUROFINS**

2417 BOND. ST.

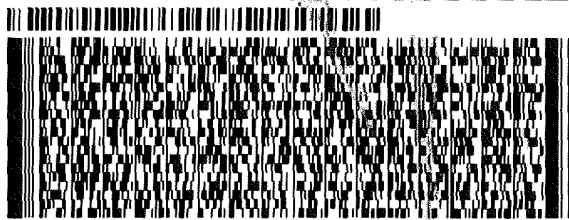
UNIVERSITY PARK IL 60484

(708) 634-6200

REF:

INU:

DEPT:



FedEx
Express



REL#
3785346

2 of 3

MPS# **3949 4676 8910**

Mstr# **3949 4676 8909**

0201

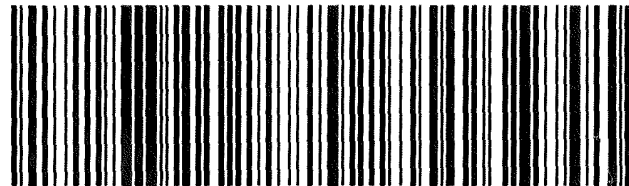
THU - 23 FEB 10:30A
PRIORITY OVERNIGHT

AHS

60484

IL-US **ORD**

XN JOTA



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



Client Information (Sub Contract Lab)		Lab PM: Mockler, Diana J		Carrier Tracking No(s): 500-171148-1	
Shipping/Receiving Company: TestAmerica Laboratories, Inc.		E-Mail: Diana.Mockler@et.eurofins.com		Page: Page 1 of 1	
Address: 13715 Rider Trail North, Earth City, MO, 63045		State of Origin: Illinois		Job #: 500-229775-2	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		Accreditations Required (See note): NELAP - Illinois		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SSO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify) Other:	
Due Date Requested: 3/14/2023		Analysis Requested		Total Number of Containers	
TAT Requested (days):		Perform MS/MSD (Yes or No)		Special Instructions/Note:	
PO #:		Field Filtered Sample (Yes or No)		Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no	
WO #:		903.0/PreSep_21 Standard Target List		Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no	
Project #: 50011612		904.0/PreSep_0 Standard Target List		Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no	
Site: MWG - Powerton		R226R228_GPC		Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no	
Sample Identification - Client ID (Lab ID)		Matrix (Water, Seawater, Urine, Blood, Saliva, etc)		Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no	
MW-02 (500-229775-1)	Sample Date: 2/21/23	Sample Time: 08:15 Central	Sample Type (C=comp, G=grab): Water	Preservation Code:	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-03 (500-229775-2)	Sample Date: 2/21/23	Sample Time: 09:27 Central	Sample Type (C=comp, G=grab): Water	Preservation Code:	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-04 (500-229775-3)	Sample Date: 2/21/23	Sample Time: 10:37 Central	Sample Type (C=comp, G=grab): Water	Preservation Code:	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-05 (500-229775-4)	Sample Date: 2/21/23	Sample Time: 11:36 Central	Sample Type (C=comp, G=grab): Water	Preservation Code:	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
Duplicate (500-229775-5)	Sample Date: 2/21/23	Sample Time: Central	Sample Type (C=comp, G=grab): Water	Preservation Code:	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/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: _____ Time: _____					
Relinquished by: <u>Stephanie Homondy</u> Date/Time: <u>2/22/23 1600</u> Company: <u>EEIA</u>					
Relinquished by: <u>EGEX</u> Date/Time: _____ Company: _____					
Relinquished by: _____ Date/Time: _____ Company: _____					
Custody Seals Intact: <u>Yes</u> <input type="checkbox"/> <u>No</u> <input type="checkbox"/>					
Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: _____					





Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Camer Tracking No(s):		COC No:						
Shipping/Receiving		Mockler, Diana J	Mockler, Diana J	Illinois		500-171178.1						
Company		E-Mail:	E-Mail:	State of Origin:		Page						
TestAmerica Laboratories, Inc.		Diana.Mockler@et.eurofins.com	Diana.Mockler@et.eurofins.com	Illinois		1 of 1						
Address:		Accreditations Required (See note):		Job #:								
13715 Rider Trail North,		NELAP - Illinois		500-229775-2								
City:		Analysis Requested		Preservation Codes:								
Earth City				M - Hexane								
State, Zip:				A - HCL								
MO, 63045				N - None								
Phone:				O - AsNaO2								
314-298-8566(Tel) 314-298-8757(Fax)				P - Na2O4S								
Email:				D - Nitric Acid								
				E - NaHSO4								
				F - MeOH								
				G - Amchlor								
				H - Ascorbic Acid								
				I - Ice								
				J - DI Water								
				K - EDTA								
				L - EDA								
				Z - other (specify)								
				Other:								
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	MATRIX (Water, Solid, Orvastical, BT=TISSUE, A=AL)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	90.0/PreSep_21 Standard Target List	90.0/PreSep_0 Standard Target List	Ra26Ra228 GFPC	Total Number of Containers	Special Instructions/Note:
MW-01 (500-229775-6)		2/22/23	10:22 Central	Water	Water	X	X	X	X		3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-10 (500-229775-7)		2/22/23	09:27 Central	Water	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/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: _____ Method of Shipment: _____
 Relinquished by: Stephanie Hernandez Date: 2/23/23 15:15 Company: EEA
 Relinquished by: Fedex Date: _____ Company: _____
 Relinquished by: _____ Date: _____ Company: _____

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: _____
 Received by: Fedex Date/Time: _____ Company: _____
 Received by: Diana Shanbary - Hongo Date/Time: 2/24/23 08:40 Company: ETA RL
 Received by: _____ Date/Time: _____ Company: _____
 Cooler Temperature(s) °C and Other Remarks: _____



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-229775-2

Login Number: 229775

List Number: 1

Creator: James, Jeff A

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6,1.5,-0.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-229775-2

Login Number: 229775

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 02/23/23 12:13 PM

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



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-229775-2

Login Number: 229775

List Number: 3

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 02/27/23 12:20 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.	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 FAB (RAD)

Job ID: 500-229775-2

Client Sample ID: MW-02

Date Collected: 02/21/23 08:15

Date Received: 02/22/23 09:55

Lab Sample ID: 500-229775-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			601677	DJP	EET SL	02/27/23 10:06
Total/NA	Analysis	903.0		1	604475	FLC	EET SL	03/21/23 21:21
Total/NA	Prep	PrecSep_0			601682	DJP	EET SL	02/27/23 10:24
Total/NA	Analysis	904.0		1	602703	SCB	EET SL	03/07/23 12:07
Total/NA	Analysis	Ra226_Ra228		1	604791	SCB	EET SL	03/23/23 12:09

Client Sample ID: MW-03

Date Collected: 02/21/23 09:27

Date Received: 02/22/23 09:55

Lab Sample ID: 500-229775-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			601677	DJP	EET SL	02/27/23 10:06
Total/NA	Analysis	903.0		1	604712	FLC	EET SL	03/22/23 07:40
Total/NA	Prep	PrecSep_0			601682	DJP	EET SL	02/27/23 10:24
Total/NA	Analysis	904.0		1	602703	SCB	EET SL	03/07/23 12:08
Total/NA	Analysis	Ra226_Ra228		1	604791	SCB	EET SL	03/23/23 12:09

Client Sample ID: MW-04

Date Collected: 02/21/23 10:37

Date Received: 02/22/23 09:55

Lab Sample ID: 500-229775-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			601677	DJP	EET SL	02/27/23 10:06
Total/NA	Analysis	903.0		1	604712	FLC	EET SL	03/22/23 07:40
Total/NA	Prep	PrecSep_0			601682	DJP	EET SL	02/27/23 10:24
Total/NA	Analysis	904.0		1	602703	SCB	EET SL	03/07/23 12:08
Total/NA	Analysis	Ra226_Ra228		1	604791	SCB	EET SL	03/23/23 12:09

Client Sample ID: MW-05

Date Collected: 02/21/23 11:36

Date Received: 02/22/23 09:55

Lab Sample ID: 500-229775-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			601677	DJP	EET SL	02/27/23 10:06
Total/NA	Analysis	903.0		1	604712	FLC	EET SL	03/22/23 07:40
Total/NA	Prep	PrecSep_0			601682	DJP	EET SL	02/27/23 10:24
Total/NA	Analysis	904.0		1	602703	SCB	EET SL	03/07/23 12:08
Total/NA	Analysis	Ra226_Ra228		1	604791	SCB	EET SL	03/23/23 12:09

Lab Chronicle

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

Job ID: 500-229775-2

Client Sample ID: Duplicate

Lab Sample ID: 500-229775-5

Date Collected: 02/21/23 00:00

Matrix: Water

Date Received: 02/22/23 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			601677	DJP	EET SL	02/27/23 10:06
Total/NA	Analysis	903.0		1	604712	FLC	EET SL	03/22/23 07:45
Total/NA	Prep	PrecSep_0			601682	DJP	EET SL	02/27/23 10:24
Total/NA	Analysis	904.0		1	602703	SCB	EET SL	03/07/23 12:08
Total/NA	Analysis	Ra226_Ra228		1	604791	SCB	EET SL	03/23/23 12:09

Client Sample ID: MW-01

Lab Sample ID: 500-229775-6

Date Collected: 02/22/23 10:22

Matrix: Water

Date Received: 02/23/23 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			601827	DJP	EET SL	02/28/23 09:01
Total/NA	Analysis	903.0		1	604715	FLC	EET SL	03/22/23 20:50
Total/NA	Prep	PrecSep_0			601828	DJP	EET SL	02/28/23 09:47
Total/NA	Analysis	904.0		1	602825	FLC	EET SL	03/08/23 12:00
Total/NA	Analysis	Ra226_Ra228		1	604834	SCB	EET SL	03/23/23 16:56

Client Sample ID: MW-10

Lab Sample ID: 500-229775-7

Date Collected: 02/22/23 09:27

Matrix: Water

Date Received: 02/23/23 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			601827	DJP	EET SL	02/28/23 09:01
Total/NA	Analysis	903.0		1	604715	FLC	EET SL	03/22/23 20:50
Total/NA	Prep	PrecSep_0			601828	DJP	EET SL	02/28/23 09:47
Total/NA	Analysis	904.0		1	602825	FLC	EET SL	03/08/23 12:01
Total/NA	Analysis	Ra226_Ra228		1	604834	SCB	EET SL	03/23/23 16:56

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: 500-229775-2

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 FAB (RAD)

Job ID: 500-229775-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
500-229775-1	MW-02	88.7	
500-229775-1 DU	MW-02	87.6	
500-229775-2	MW-03	92.4	
500-229775-3	MW-04	88.1	
500-229775-4	MW-05	90.1	
500-229775-5	Duplicate	74.6	
500-229775-6	MW-01	91.5	
500-229775-7	MW-10	76.3	
LCS 160-601677/2-A	Lab Control Sample	91.5	
LCS 160-601827/2-A	Lab Control Sample	88.4	
MB 160-601677/1-A	Method Blank	92.9	
MB 160-601827/1-A	Method Blank	89.5	
Tracer/Carrier Legend			
Ba = Ba Carrier			

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
500-229775-1	MW-02	88.7	85.6
500-229775-1 DU	MW-02	87.6	83.4
500-229775-2	MW-03	92.4	85.2
500-229775-3	MW-04	88.1	80.7
500-229775-4	MW-05	90.1	86.0
500-229775-5	Duplicate	74.6	78.1
500-229775-6	MW-01	91.5	87.5
500-229775-7	MW-10	76.3	86.0
LCS 160-601682/2-A	Lab Control Sample	91.5	84.1
LCS 160-601828/2-A	Lab Control Sample	88.4	85.2
MB 160-601682/1-A	Method Blank	92.9	87.1
MB 160-601828/1-A	Method Blank	89.5	83.7
Tracer/Carrier Legend			
Ba = Ba Carrier			
Y = Y Carrier			

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

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

Generated 6/6/2023 3:35:40 PM

JOB DESCRIPTION

Powerton CCR FAB

JOB NUMBER

500-233911-1

Eurofins Chicago

Job Notes

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

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

Authorization



Generated
6/6/2023 3:35:40 PM

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



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	14
QC Association	15
QC Sample Results	18
Chain of Custody	23
Receipt Checklists	27
Chronicle	28
Certification Summary	31

Case Narrative

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

Job ID: 500-233911-1

Job ID: 500-233911-1

Laboratory: Eurofins Chicago

Narrative

**Job Narrative
500-233911-1**

Receipt

The samples were received on 5/17/2023 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.1° C and 4.5° C.

Metals

Method 6020A: The low level and continuing calibration verification (CCVL, CCV) associated with batch 500-715021 recovered above the upper control limit for Beryllium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

General Chemistry

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

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



Method Summary

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

Job ID: 500-233911-1

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

Protocol References:

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

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

Laboratory References:

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

Sample Summary

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

Job ID: 500-233911-1

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

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

Client Sample Results

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

Job ID: 500-233911-1

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

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

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

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

Method: SW846 7470A - Mercury (CVAA)

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

General Chemistry

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

Client Sample Results

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

Job ID: 500-233911-1

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

Lab Sample ID: 500-233911-2
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		05/22/23 09:04	05/24/23 21:46	1
Arsenic	<0.0010		0.0010		mg/L		05/22/23 09:04	05/23/23 23:57	1
Barium	0.068		0.0025		mg/L		05/22/23 09:04	05/24/23 21:46	1
Beryllium	<0.0010	^+ ^1+	0.0010		mg/L		05/22/23 09:04	05/23/23 23:57	1
Boron	0.15		0.050		mg/L		05/22/23 09:04	05/23/23 23:57	1
Cadmium	<0.00050		0.00050		mg/L		05/22/23 09:04	05/23/23 23:57	1
Calcium	80		0.20		mg/L		05/22/23 09:04	05/24/23 21:46	1
Chromium	<0.0050		0.0050		mg/L		05/22/23 09:04	05/23/23 23:57	1
Cobalt	<0.0010		0.0010		mg/L		05/22/23 09:04	05/23/23 23:57	1
Lead	<0.00050		0.00050		mg/L		05/22/23 09:04	05/23/23 23:57	1
Lithium	<0.010		0.010		mg/L		05/22/23 09:04	05/25/23 23:06	1
Molybdenum	<0.0050		0.0050		mg/L		05/22/23 09:04	05/23/23 23:57	1
Selenium	0.0038		0.0025		mg/L		05/22/23 09:04	05/23/23 23:57	1
Thallium	<0.0020		0.0020		mg/L		05/22/23 09:04	05/23/23 23:57	1

Method: SW846 7470A - Mercury (CVAA)

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

General Chemistry

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

Client Sample Results

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

Job ID: 500-233911-1

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

Lab Sample ID: 500-233911-3
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		05/22/23 09:04	05/24/23 21:50	1
Arsenic	<0.0010		0.0010		mg/L		05/22/23 09:04	05/24/23 00:00	1
Barium	0.034		0.0025		mg/L		05/22/23 09:04	05/24/23 21:50	1
Beryllium	<0.0010	^+ ^1+	0.0010		mg/L		05/22/23 09:04	05/24/23 00:00	1
Boron	0.66		0.050		mg/L		05/22/23 09:04	05/24/23 00:00	1
Cadmium	<0.00050		0.00050		mg/L		05/22/23 09:04	05/24/23 00:00	1
Calcium	100		0.20		mg/L		05/22/23 09:04	05/24/23 21:50	1
Chromium	<0.0050		0.0050		mg/L		05/22/23 09:04	05/24/23 00:00	1
Cobalt	<0.0010		0.0010		mg/L		05/22/23 09:04	05/24/23 00:00	1
Lead	<0.00050		0.00050		mg/L		05/22/23 09:04	05/24/23 00:00	1
Lithium	<0.010		0.010		mg/L		05/22/23 09:04	05/25/23 23:10	1
Molybdenum	<0.0050		0.0050		mg/L		05/22/23 09:04	05/24/23 00:00	1
Selenium	<0.0025		0.0025		mg/L		05/22/23 09:04	05/24/23 00:00	1
Thallium	<0.0020		0.0020		mg/L		05/22/23 09:04	05/24/23 00:00	1

Method: SW846 7470A - Mercury (CVAA)

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

General Chemistry

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

Client Sample Results

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

Job ID: 500-233911-1

Client Sample ID: MW-05

Lab Sample ID: 500-233911-4

Date Collected: 05/16/23 11:45

Matrix: Water

Date Received: 05/17/23 10:00

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

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

Method: SW846 7470A - Mercury (CVAA)

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

General Chemistry

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

Client Sample Results

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

Job ID: 500-233911-1

Client Sample ID: MW-10

Lab Sample ID: 500-233911-5

Date Collected: 05/17/23 09:08

Matrix: Water

Date Received: 05/18/23 09:40

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

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

Method: SW846 7470A - Mercury (CVAA)

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

General Chemistry

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

Client Sample Results

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

Job ID: 500-233911-1

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

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

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

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

Method: SW846 7470A - Mercury (CVAA)

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

General Chemistry

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

Client Sample Results

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

Job ID: 500-233911-1

Client Sample ID: Duplicate

Lab Sample ID: 500-233911-7

Date Collected: 05/17/23 00:00

Matrix: Water

Date Received: 05/18/23 09:40

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

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

Method: SW846 7470A - Mercury (CVAA)

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

General Chemistry

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

Definitions/Glossary

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

Job ID: 500-233911-1

Qualifiers

Metals

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

Glossary

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

QC Association Summary

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

Job ID: 500-233911-1

Metals

Prep Batch: 714516

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

Analysis Batch: 715021

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

Analysis Batch: 715273

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

Analysis Batch: 715492

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

Prep Batch: 716804

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

Eurofins Chicago

QC Association Summary

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

Job ID: 500-233911-1

Metals (Continued)

Prep Batch: 716804 (Continued)

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

Analysis Batch: 717019

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

General Chemistry

Analysis Batch: 713901

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

Analysis Batch: 714420

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

Analysis Batch: 714421

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

Eurofins Chicago

QC Association Summary

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

Job ID: 500-233911-1

General Chemistry

Analysis Batch: 714514

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

Analysis Batch: 715052

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

Analysis Batch: 715089

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

Analysis Batch: 715553

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

QC Sample Results

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

Job ID: 500-233911-1

Method: 6020A - Metals (ICP/MS)

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

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

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

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

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

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

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

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

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

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

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Antimony	0.500	0.515		mg/L		103	80 - 120
Barium	2.00	1.93		mg/L		97	80 - 120
Calcium	10.0	8.99		mg/L		90	80 - 120

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

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Lithium	0.500	0.473		mg/L		95	80 - 120

QC Sample Results

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

Job ID: 500-233911-1

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

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

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

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

Method: 7470A - Mercury (CVAA)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Eurofins Chicago

QC Sample Results

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

Job ID: 500-233911-1

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

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

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

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

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

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	240		mg/L		96	80 - 120

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

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

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

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

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	242		mg/L		97	80 - 120

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

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

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

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

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	244		mg/L		98	80 - 120

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

Client Sample ID: Duplicate
Prep Type: Total/NA

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

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

Client Sample ID: Duplicate
Prep Type: Total/NA

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

Euofins Chicago

QC Sample Results

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

Job ID: 500-233911-1

Method: SM 4500 Cl- E - Chloride, Total

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

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

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

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

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	19.5		mg/L		98	85 - 115

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

Client Sample ID: Duplicate
Prep Type: Total/NA

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

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

Client Sample ID: Duplicate
Prep Type: Total/NA

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

Method: SM 4500 F C - Fluoride

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

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

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

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

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

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

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

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

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

QC Sample Results

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

Job ID: 500-233911-1

Method: SM 4500 F C - Fluoride (Continued)

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

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

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

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

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

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

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

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

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

Method: SM 4500 SO4 E - Sulfate, Total

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

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

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

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

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	20.0	20.6		mg/L		103	88 - 123

Chain of Custody Record



Client Information
 Client Contact: Kaelyn Sperle
 Company: KPRG and Associates Inc
 Address: 14665 West Lisbon Road, Suite 1A
 City: Brookfield
 State Zip: WI, 53005
 Phone: 262-781-0475(Tel)
 Email: kaelyns@kprginc.com
 Project Name: Powerton CCR FAB
 Site: Illinois

Sampler
 Kaelyn Sperle
 Phone: 262-278-1621

Lab PM:
 Mockler, Diana J
 E-Mail: Diana.Mockler@et.eurofinsus.com

Carrier Tracking No(s)
 500-233911 COC 31

State of Origin
 IL

Analysis Requested

Field Filtered Sample (Yes or No)	Perform SIMSD (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

Job #: 500-233911

Preservation Codes
 A - HCL
 B - NaOH
 C - Zn Acetate
 D - Nitric Acid
 E - NaHSO4
 F - MeOH
 G - Amchlor
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - EDA
 M - Hexane
 N - None
 O - AsNaO2
 P - Na2O4S
 Q - Na2SO3
 R - Na2S2O3
 S - H2SO4
 T - TSP Dodecahydrate
 U - Acetone
 V - MCAA
 W - pH 4-5
 Y - Trizma
 Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Ak)	Field Filtered Sample (Yes or No)	Perform SIMSD (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	Total Number of containers	Special Instructions/Note
MW-02	5/16/23	0906	G	Water	N	N	X	X	X	X	X		
MW-03	5/16/23	0954		Water	N	N							
MW-04	5/16/23	1048		Water	N	N							
MW-05	5/16/23	1145		Water	N	N							
				Water									
				Water									
				Water									
				Water									

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

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

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements

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

Relinquished by: Kaelyn Sperle **Date/Time:** 5/16/23/1700 **Company:** KPRG

Received by: FedEx **Date/Time:** 5/16/23/1700 **Company:** FedEx

Relinquished by: _____ **Date/Time:** _____ **Company:** _____

Received by: _____ **Date/Time:** _____ **Company:** _____

Relinquished by: _____ **Date/Time:** _____ **Company:** _____

Received by: _____ **Date/Time:** 5/16/23 1000 **Company:** _____

Cooler Temperature(s) °C and Other Remarks: 4.6 - 4.5

RTD 10 30 9659
ST 18 17

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

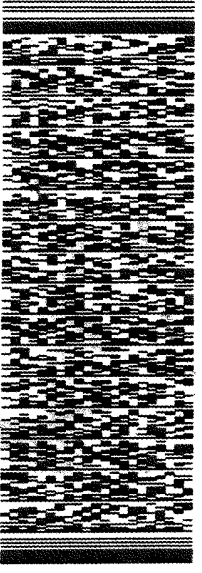
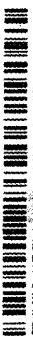
SHIP DATE: 18MAY23
ACTWT: 58.00 LB
CRD: 8994779/SSF2420
DIMS: 24x18x12 IN
BILL THIRD PARTY

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

UNIVERSITY PARK IL 60484

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

DEPT:



4 of 4

MPS# 3983 9576 9659

0263

Mstr# 3983 9576 9626

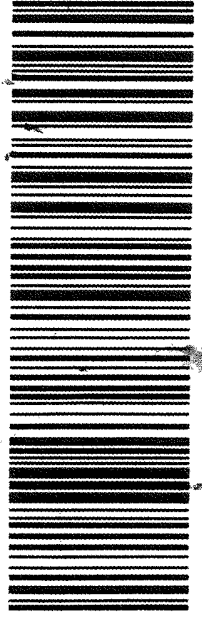
XN JOTA

0201

60484
IL-US ORD

WED - 17 MAY 10:30A
PRIORITY OVERNIGHT

500-233911 Waybi



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

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

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

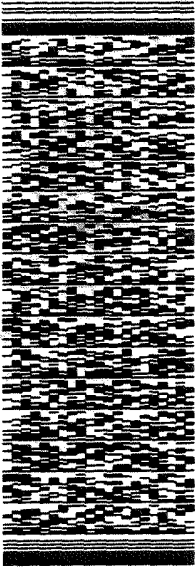
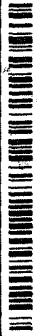
TO **SAMPLE RECEIVING**
EUROFINS
2417 BOND ST

UNIVERSITY PARK IL 60484

(000) 000-0000
NO:
PSI

REF:

DEPT:



FedEx
Express



J23202304050101

THU - 18 MAY 10:30A
PRIORITY OVERNIGHT

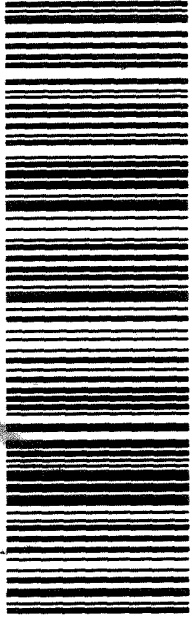
3 of 6
MPS# 3984 4873 0163
0263

Mstr# 3984 4873 0141

0201

XN JOTA

60484
IL-US ORD



500-233911 Waybl



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



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-233911-1

Login Number: 233911

List Number: 1

Creator: James, Jeff A

List Source: Eurofins Chicago

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

Lab Chronicle

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

Job ID: 500-233911-1

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

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

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

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

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

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

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

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

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

Eurofins Chicago

Lab Chronicle

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

Job ID: 500-233911-1

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

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

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

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

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

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

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

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

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

Lab Chronicle

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

Job ID: 500-233911-1

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

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

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

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

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

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

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

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 500-233911-1

Laboratory: Eurofins Chicago

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

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

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

ANALYTICAL REPORT

PREPARED FOR

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

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

JOB DESCRIPTION

Powerton CCR FAB (RAD)

JOB NUMBER

500-233911-2

Eurofins Chicago

Job Notes

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

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

Authorization



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

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



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Method Summary	6
Sample Summary	7
Client Sample Results	8
Definitions	15
QC Association	16
QC Sample Results	17
Chain of Custody	21
Receipt Checklists	27
Chronicle	30
Certification Summary	32
Tracer Carrier Summary	33

Case Narrative

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

Job ID: 500-233911-2

Job ID: 500-233911-2

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-233911-2

Receipt

The samples were received on 5/17/2023 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.1° C and 4.5° C.

RAD

Methods 903.0, 9315: Radium-226 batch 613264

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

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

Method 903.0: Radium-226 batch 613094

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

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

Methods 903.0, 9315: Radium-226 batch 613260

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

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

Method 904.0: Radium-228 batch 613098

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

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

Methods 904.0, 9320: Radium-228 batch 613351

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

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

Methods 904.0, 9320: Radium-228 batch 613360

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

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

Method PrecSep_0:

Method PrecSep_0:

Method PrecSep_0:

Case Narrative

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

Job ID: 500-233911-2

Job ID: 500-233911-2 (Continued)

Laboratory: Eurofins Chicago (Continued)

Method PrecSep-21:

Method PrecSep-21:

Method PrecSep-21:

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

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

Method Summary

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

Job ID: 500-233911-2

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

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

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

Sample Summary

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

Job ID: 500-233911-2

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

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

Client Sample Results

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

Job ID: 500-233911-2

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

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

Method: EPA 903.0 - Radium-226 (GFPC)

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

Method: EPA 904.0 - Radium-228 (GFPC)

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

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

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

Client Sample Results

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

Job ID: 500-233911-2

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

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

Method: EPA 903.0 - Radium-226 (GFPC)

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

Method: EPA 904.0 - Radium-228 (GFPC)

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

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

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

Client Sample Results

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

Job ID: 500-233911-2

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

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

Method: EPA 903.0 - Radium-226 (GFPC)

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

Method: EPA 904.0 - Radium-228 (GFPC)

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

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

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

Client Sample Results

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

Job ID: 500-233911-2

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

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

Method: EPA 903.0 - Radium-226 (GFPC)

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

Method: EPA 904.0 - Radium-228 (GFPC)

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

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

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

Client Sample Results

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

Job ID: 500-233911-2

Client Sample ID: MW-10

Lab Sample ID: 500-233911-5

Date Collected: 05/17/23 09:08

Matrix: Water

Date Received: 05/18/23 09:40

Method: EPA 903.0 - Radium-226 (GFPC)

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

Method: EPA 904.0 - Radium-228 (GFPC)

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

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

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

Client Sample Results

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

Job ID: 500-233911-2

Client Sample ID: MW-01

Lab Sample ID: 500-233911-6

Date Collected: 05/17/23 12:36

Matrix: Water

Date Received: 05/18/23 09:40

Method: EPA 903.0 - Radium-226 (GFPC)

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

Method: EPA 904.0 - Radium-228 (GFPC)

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

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

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

Client Sample Results

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

Job ID: 500-233911-2

Client Sample ID: Duplicate

Lab Sample ID: 500-233911-7

Date Collected: 05/17/23 00:00

Matrix: Water

Date Received: 05/18/23 09:40

Method: EPA 903.0 - Radium-226 (GFPC)

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

Method: EPA 904.0 - Radium-228 (GFPC)

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

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

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

Definitions/Glossary

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

Job ID: 500-233911-2

Qualifiers

Rad

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

Glossary

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

QC Association Summary

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

Job ID: 500-233911-2

Rad

Prep Batch: 613094

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

Prep Batch: 613098

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

Prep Batch: 613260

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

Prep Batch: 613264

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

Prep Batch: 613351

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

Prep Batch: 613360

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

QC Sample Results

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

Job ID: 500-233911-2

Method: 903.0 - Radium-226 (GFPC)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Eurolins Chicago

QC Sample Results

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

Job ID: 500-233911-2

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

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

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

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

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

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

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

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

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

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

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

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

Method: 904.0 - Radium-228 (GFPC)

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

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

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

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

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

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

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

Euromins Chicago

QC Sample Results

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

Job ID: 500-233911-2

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Eurofins Chicago

QC Sample Results

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

Job ID: 500-233911-2

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

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

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

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

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

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

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

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

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

Eurofins Chicago

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

Chain of Custody Record



Environment Testing

Client Information			Sampler Kaelyn Sperle		Lab PM: Mockler, Diana J		Carrier Tracking No(s) 500-233911 COC 91																																																																		
Client Contact: Kaelyn Sperle			Phone: 262-278-1621		E-Mail: Diana.Mockler@et.eurofinsus.com		State of Origin IL																																																																		
Company: KPRG and Associates Inc			PWSID		Analysis Requested					Page 1 of 1 Job #: 500-233911																																																															
Address: 14665 West Lisbon Road, Suite 1A			Due Date Requested Standard		<table border="1"> <tr><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></tr> <tr><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></tr> <tr><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></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																																																																				Preservation Codes A - HCL M - Hexane B - NaOH N - None C - Zn Acetate P - Na2O4S D - Nitric Acid Q - Na2SO3 E - NaHSO4 R - Na2S2O3 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:
City: Brookfield			TAT Requested (days): Standard		Compliance Project. <input type="checkbox"/> Yes <input type="checkbox"/> No																																																																				
State Zip WI, 53005			PO # 4502125100		WO #:																																																																				
Phone 262-781-0475(Tel)			Project #: 50011612		SSOW#:																																																																				
Email kaelyns@kprginc.com			Project Name: Powerton CCR FAB		Site: Illinois																																																																				
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 SIMSD (Yes or No)		903.0 - Standard Target List		Raz26Raz28_GFPC - Local Method		904.0 - Standard Target List		6020A, 7470A		2540C, 4500_F_C, SM4500_C1_E, SM4500_S04_E		Total Number of containers		Special Instructions/Note																																														
							Preservation Code:																																																																		
MW-02			5/16/23		0906		G		Water		M		N		X		X		X		X		X																																																		
MW-03			5/16/23		0954				Water		M		N																																																												
MW-04			5/16/23		1048				Water		M		N																																																												
MW-05			5/16/23		1145				Water		M		N																																																												
									Water																																																																
									Water																																																																
									Water																																																																
									Water																																																																
									Water																																																																

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

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

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

Deliverable Requested I II III IV Other (specify) _____

Special Instructions/QC Requirements _____

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

Relinquished by: Kaelyn Sperle	Date/Time: 5/16/23/1700	Company: KPRG	Received by: FedEx	Date/Time: 5/16/23/1700	Company: FedEx
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by: Kaelyn Sperle	Date/Time: 5/16/23 1000	Company:

Custody Seals Intact. Yes No Custody Seal No _____

Cooler Temperature(s) °C and Other Remarks: 4.6-4.5

Eurofins Chicago

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

Chain of Custody Record



Environment Testing

Client Information		Sampler: <u>Kaelyn Sperle</u>		Lab PM: <u>Mockler, Diana J</u>		Carrier Tracking No(s):		500-233911 COC 1																																								
Client Contact: <u>Kaelyn Sperle</u>		Phone: <u>262-278-1621</u>		E-Mail: <u>Diana Mockler@et.eurofins.com</u>		State of Origin: <u>IL</u>																																										
Company: <u>KPRG and Associates, Inc</u>		PWSID:		Analysis Requested						Job #:																																						
Address: <u>14665 West Lisbon Road, Suite 1A</u>		Due Date Requested: <u>Standard</u>		<table border="1"> <thead> <tr> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>903.0 - Standard Target List</th> <th>Ra226Ra228_GPPC - Local Method</th> <th>904.0 - Standard Target List</th> <th>6020A, 7470A</th> <th>2540C, 4500_F_C, SM4500_Cl_E, SM4500_SO4_E</th> </tr> </thead> <tbody> <tr> <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> </tr> <tr> <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> </tr> </tbody> </table>						Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0 - Standard Target List	Ra226Ra228_GPPC - Local Method	904.0 - Standard Target List	6020A, 7470A	2540C, 4500_F_C, SM4500_Cl_E, SM4500_SO4_E																													Preservation Codes			
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0 - Standard Target List	Ra226Ra228_GPPC - Local Method							904.0 - Standard Target List	6020A, 7470A	2540C, 4500_F_C, SM4500_Cl_E, SM4500_SO4_E																																				
City: <u>Brookfield</u>		TAT Requested (days): <u>Standard</u>								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)																																				
State, Zip: <u>WI, 53005</u>		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No								Other:																																						
Phone: <u>262-781-0475(Tel)</u>		PO #: <u>4502125100</u>								Special Instructions/Note:																																						
Email: <u>kaelyns@kprginc.com</u>		WO #:								Total Number of Containers																																						
Project Name: <u>Powerton CCR FAB</u>		Project #: <u>50011612</u>																																														
Site: <u>Illinois</u>		SSOW#:																																														
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)																																											
				Preservation Code.	X	X	D	D	D	D	N																																					
<u>5</u> MW-10		<u>5/17/23</u>	<u>0908</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>																																					
<u>6</u> MW-01		<u>5/17/23</u>	<u>1236</u>	<u>↓</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>																																					
<u>7</u> Duplicate		<u>5/17/23</u>	<u>-</u>	<u>↓</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>																																					
					Water																																											
					Water																																											
					Water																																											
					Water																																											
					Water																																											

5
6
7

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

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

Empty Kit Relinquished by		Date		Time		Method of Shipment:	
Relinquished by: <u>Kaelyn Sperle</u>		Date/Time: <u>5/17/23/1730</u>		Company: <u>KPRG</u>		Received by: <u>FedEx</u>	
Relinquished by:		Date/Time:		Company:		Date/Time: <u>5/17/23/1730</u>	
Relinquished by:		Date/Time:		Company:		Date/Time: <u>5/18/23 0840</u>	
Relinquished by:		Date/Time:		Company:		Date/Time:	
Custody Seals Intact.		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: <u>0.9 - 0.1</u>			
<input type="checkbox"/> Yes <input type="checkbox"/> No							

RTD 10 30 9659
ST 18 17

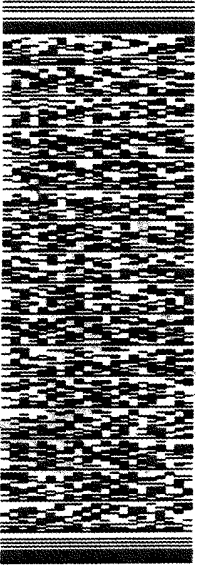
ORIGIN ID:PIAR (262) 278-1621
KPRG AND ASSOCIATES
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US

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

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

UNIVERSITY PARK IL 60484

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



4 of 4

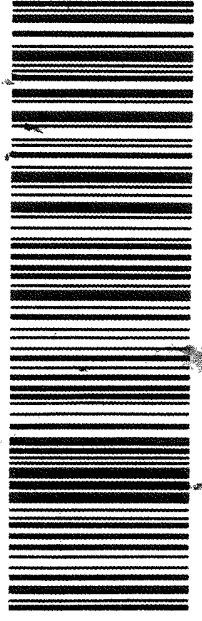
MPS# 3983 9576 9659
0263
Mstr# 3983 9576 9626

XN JOTA

60484
IL-US ORD

WED - 17 MAY 10:30A
PRIORITY OVERNIGHT

500-233911 Waybi



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

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

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

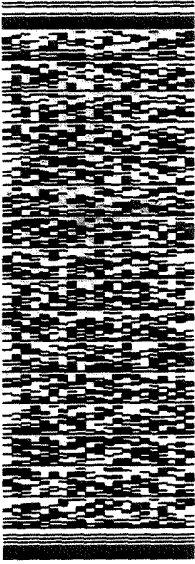
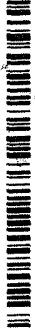
TO **SAMPLE RECEIVING**
EUROFINS
2417 BOND ST

UNIVERSITY PARK IL 60484

(000) 000-0000
NO:
PSI

REF:

DEPT:



FedEx
Express



J23202304050101

THU - 18 MAY 10:30A
PRIORITY OVERNIGHT

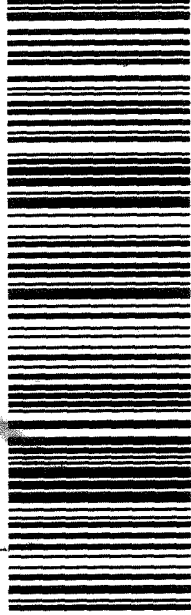
3 of 6
MPS# 3984 4873 0163
0263

Mstr# 3984 4873 0141

XN JOTA

0201

60484
IL-US ORD



500-233911 Waybl



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



Chain of Custody Record



Environment Testing

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

Client Information (Sub Contract Lab)
 Client Contact: Mockler, Diana J
 Shipping/Receiving: Diana.Mockler@eurofins.com
 Company: TestAmerica Laboratories, Inc. Accreditations Required (See note): NELAP - Illinois
 Address: 13715 Rider Trail North, Illinois
 City: Earth City
 State, Zip: MO, 63045
 Phone: 314-298-8566(Tel) 314-298-8757(Fax)
 Email:
 PO #:
 WO #:
 Project #: 50011612
 Site: MWG - Powerton

Sample Identification - Client ID (Lab ID)
 MW-02 (500-233911-1)
 MW-03 (500-233911-2)
 MW-04 (500-233911-3)
 MW-05 (500-233911-4)

Sample ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=water/oil, BT=tissue, A=air)	Field Filtered Sample (Yes or No)	Form MS/MSD (Yes or No)	903.0/PreSep_21 Standard Target List	904.0/PreSep_0 Standard Target List	Field Filled Sample (Yes or No)	Preservation Code:
MW-02 (500-233911-1)	5/16/23	09:06 Central		Water		X	X	X	X	R226R228_GFC
MW-03 (500-233911-2)	5/16/23	09:54 Central		Water		X	X	X	X	
MW-04 (500-233911-3)	5/16/23	10:48 Central		Water		X	X	X	X	
MW-05 (500-233911-4)	5/16/23	11:45 Central		Water		X	X	X	X	

Sample ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=water/oil, BT=tissue, A=air)	Field Filtered Sample (Yes or No)	Form MS/MSD (Yes or No)	903.0/PreSep_21 Standard Target List		904.0/PreSep_0 Standard Target List		Special Instructions/Note:
							Field Filled Sample (Yes or No)	Form MS/MSD (Yes or No)	903.0/PreSep_21 Standard Target List	904.0/PreSep_0 Standard Target List	
MW-02 (500-233911-1)	5/16/23	09:06 Central		Water		X	X	X	X	X	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-03 (500-233911-2)	5/16/23	09:54 Central		Water		X	X	X	X	X	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-04 (500-233911-3)	5/16/23	10:48 Central		Water		X	X	X	X	X	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-05 (500-233911-4)	5/16/23	11:45 Central		Water		X	X	X	X	X	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/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: <i>Edwin Smith</i>	5/17/23	1510	Received by: <i>FedEx</i>
Relinquished by: <i>FedEx</i>			Received by: <i>Conor Folsom</i>
			Received by: <i>ETA 5TL</i>

Custody Seals Intact: Yes No Δ

Company: _____
 Date/Time: _____
 Date/Time: _____
 Date/Time: _____
 Cooler Temperature(s) °C and Other Remarks: _____



Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Camera Tracking No(s):	COC No:
Client Contact: Shipping/Receiving		Phone:	Mockler, Diana J	State of Origin:	500-174050.1
Company: TestAmerica Laboratories, Inc.		E-Mail:	Diana.Mockler@et.eurofins.com	Illinois	Page: Page 1 of 1
Address: 13715 Rider Trail North,		Accreditations Required (See note): NELAP - Illinois		Job #:	500-233911-2
City: Earth City	Due Date Requested: 6/21/2023	Analysis Requested			
State, Zip: MO, 63045	TAT Requested (days):	Perform MS/MSD (Yes or No)			
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	FO #:	Field Filtered Sample (Yes or No)			
Email:	WO #:	903.0/PreSep_21 Standard Target List			
Project Name: Powerton CCR FAB (RAD)	Project #: 50011612	904.0/PreSep_0 Standard Target List			
Site: MWG - Powerton	SSOW#:	R226Ra228_GFPc			
		Total Number of Containers			
		Special Instructions/Note:			
		3 Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no			
		3 Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no			
		3 Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no			
		9			
<p>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.</p>					
Possible Hazard Identification					
Unconfirmed					
Deliverable Requested: I, II, III, IV, Other (specify)					
Primary Deliverable Rank: 2					
Date: _____ Time: _____					
Relinquished by: _____ Date/Time: _____					
Relinquished by: _____ Date/Time: _____					
Relinquished by: _____ Date/Time: _____					
Custody Seals Intact: _____ Custody Seal No.: _____					
Cooler Temperature(s) °C and Other Remarks:					



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-233911-2

Login Number: 233911

List Number: 1

Creator: James, Jeff A

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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: 500-233911-2

Login Number: 233911

List Number: 2

Creator: Farrell, Conor P

List Source: Eurofins St. Louis

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

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

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-233911-2

Login Number: 233911

List Number: 3

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

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

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



Lab Chronicle

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

Job ID: 500-233911-2

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

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

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

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

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

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

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

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

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

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

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

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

Lab Chronicle

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

Job ID: 500-233911-2

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

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

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

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

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

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

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

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

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

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 500-233911-2

Laboratory: Eurofins St. Louis

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

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

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

Tracer/Carrier Summary

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

Job ID: 500-233911-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

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

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

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

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

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

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

Generated 9/22/2023 9:48:30 AM

JOB DESCRIPTION

Powerton CCR FAB

JOB NUMBER

500-238774-1

Eurofins Chicago

Job Notes

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

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

Authorization



Generated
9/22/2023 9:48:30 AM

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



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	14
QC Association	15
QC Sample Results	18
Chain of Custody	24
Receipt Checklists	30
Chronicle	32
Certification Summary	35

Case Narrative

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

Job ID: 500-238774-1

Job ID: 500-238774-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-238774-1

Receipt

The samples were received on 8/29/2023 10:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.5° C and 8.4° C.

Receipt Exceptions

The following samples were received at the laboratory outside the required temperature criteria: MW-05 (500-238774-4), MW-01 (500-238774-5), MW-10 (500-238774-6) and Duplicate (500-238774-7).

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.

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

Method Summary

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

Job ID: 500-238774-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
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 CF
7470A	Preparation, Mercury	SW846	EET CF

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 CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

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: 500-238774-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-238774-1	MW-02	Water	08/28/23 10:55	08/29/23 10:10
500-238774-2	MW-03	Water	08/28/23 11:28	08/29/23 10:10
500-238774-3	MW-04	Water	08/28/23 12:31	08/29/23 10:10
500-238774-4	MW-05	Water	08/29/23 08:50	08/30/23 10:10
500-238774-5	MW-01	Water	08/29/23 12:20	08/30/23 10:10
500-238774-6	MW-10	Water	08/29/23 13:32	08/30/23 10:10
500-238774-7	Duplicate	Water	08/29/23 00:00	08/30/23 10:10

1

2

3

4

5

6

7

8

9

10

11

12

13

Client Sample Results

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

Job ID: 500-238774-1

Client Sample ID: MW-02
Date Collected: 08/28/23 10:55
Date Received: 08/29/23 10:10

Lab Sample ID: 500-238774-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0020		0.0020		mg/L		09/01/23 09:00	09/15/23 19:09	1
Boron	2.7		0.10		mg/L		09/01/23 09:00	09/19/23 17:43	1
Barium	0.081		0.0020		mg/L		09/01/23 09:00	09/15/23 19:09	1
Beryllium	<0.0010		0.0010		mg/L		09/01/23 09:00	09/15/23 19:09	1
Calcium	94		0.50		mg/L		09/01/23 09:00	09/15/23 19:09	1
Cadmium	<0.00020		0.00020		mg/L		09/01/23 09:00	09/15/23 19:09	1
Cobalt	<0.00050		0.00050		mg/L		09/01/23 09:00	09/15/23 19:09	1
Chromium	<0.0050		0.0050		mg/L		09/01/23 09:00	09/15/23 19:09	1
Molybdenum	<0.0020		0.0020		mg/L		09/01/23 09:00	09/15/23 19:09	1
Lead	0.00058		0.00050		mg/L		09/01/23 09:00	09/19/23 17:43	1
Antimony	<0.0020	F1	0.0020		mg/L		09/01/23 09:00	09/19/23 17:43	1
Selenium	<0.0050		0.0050		mg/L		09/01/23 09:00	09/15/23 19:09	1
Thallium	0.0031	F1	0.0010		mg/L		09/01/23 09:00	09/21/23 14:31	1
Lithium	<0.010		0.010		mg/L		09/01/23 09:00	09/15/23 19:09	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/08/23 10:26	09/11/23 10:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	490		10		mg/L			08/31/23 23:27	1
Chloride (SM 4500 Cl- E)	46		4.0		mg/L			08/31/23 14:34	2
Fluoride (SM 4500 F C)	0.16		0.10		mg/L			09/10/23 12:19	1
Sulfate (SM 4500 SO4 E)	70		10		mg/L			08/30/23 14:49	2

Client Sample Results

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

Job ID: 500-238774-1

Client Sample ID: MW-03
Date Collected: 08/28/23 11:28
Date Received: 08/29/23 10:10

Lab Sample ID: 500-238774-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0020		0.0020		mg/L		09/01/23 09:00	09/15/23 19:44	1
Boron	0.32		0.10		mg/L		09/01/23 09:00	09/19/23 17:49	1
Barium	0.096		0.0020		mg/L		09/01/23 09:00	09/15/23 19:44	1
Beryllium	<0.0010		0.0010		mg/L		09/01/23 09:00	09/15/23 19:44	1
Calcium	73		0.50		mg/L		09/01/23 09:00	09/15/23 19:44	1
Cadmium	<0.00020		0.00020		mg/L		09/01/23 09:00	09/15/23 19:44	1
Cobalt	<0.00050		0.00050		mg/L		09/01/23 09:00	09/15/23 19:44	1
Chromium	<0.0050		0.0050		mg/L		09/01/23 09:00	09/15/23 19:44	1
Molybdenum	0.0023		0.0020		mg/L		09/01/23 09:00	09/15/23 19:44	1
Lead	<0.00050		0.00050		mg/L		09/01/23 09:00	09/19/23 17:49	1
Antimony	<0.0020		0.0020		mg/L		09/01/23 09:00	09/19/23 17:49	1
Selenium	0.0070		0.0050		mg/L		09/01/23 09:00	09/15/23 19:44	1
Thallium	0.0030		0.0010		mg/L		09/01/23 09:00	09/19/23 17:49	1
Lithium	<0.010		0.010		mg/L		09/01/23 09:00	09/15/23 19:44	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/08/23 10:26	09/11/23 10:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	430		10		mg/L			08/31/23 23:30	1
Chloride (SM 4500 Cl- E)	82		4.0		mg/L			08/31/23 14:34	2
Fluoride (SM 4500 F C)	0.20		0.10		mg/L			09/10/23 12:24	1
Sulfate (SM 4500 SO4 E)	36		10		mg/L			08/30/23 15:09	2

Client Sample Results

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

Job ID: 500-238774-1

Client Sample ID: MW-04
Date Collected: 08/28/23 12:31
Date Received: 08/29/23 10:10

Lab Sample ID: 500-238774-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0020		0.0020		mg/L		09/01/23 09:00	09/15/23 19:48	1
Boron	0.78		0.10		mg/L		09/01/23 09:00	09/19/23 17:52	1
Barium	0.062		0.0020		mg/L		09/01/23 09:00	09/15/23 19:48	1
Beryllium	<0.0010		0.0010		mg/L		09/01/23 09:00	09/15/23 19:48	1
Calcium	95		0.50		mg/L		09/01/23 09:00	09/15/23 19:48	1
Cadmium	<0.00020		0.00020		mg/L		09/01/23 09:00	09/15/23 19:48	1
Cobalt	<0.00050		0.00050		mg/L		09/01/23 09:00	09/15/23 19:48	1
Chromium	<0.0050		0.0050		mg/L		09/01/23 09:00	09/15/23 19:48	1
Molybdenum	<0.0020		0.0020		mg/L		09/01/23 09:00	09/15/23 19:48	1
Lead	<0.00050		0.00050		mg/L		09/01/23 09:00	09/19/23 17:52	1
Antimony	<0.0020		0.0020		mg/L		09/01/23 09:00	09/19/23 17:52	1
Selenium	<0.0050		0.0050		mg/L		09/01/23 09:00	09/15/23 19:48	1
Thallium	<0.0010		0.0010		mg/L		09/01/23 09:00	09/19/23 17:52	1
Lithium	<0.010		0.010		mg/L		09/01/23 09:00	09/15/23 19:48	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/08/23 10:26	09/11/23 10:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	610		10		mg/L			08/31/23 23:32	1
Chloride (SM 4500 Cl- E)	72		4.0		mg/L			08/31/23 14:35	2
Fluoride (SM 4500 F C)	0.24		0.10		mg/L			09/10/23 12:36	1
Sulfate (SM 4500 SO4 E)	110		25		mg/L			08/30/23 15:09	5

Client Sample Results

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

Job ID: 500-238774-1

Client Sample ID: MW-05
Date Collected: 08/29/23 08:50
Date Received: 08/30/23 10:10

Lab Sample ID: 500-238774-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0020		0.0020		mg/L		09/01/23 09:00	09/15/23 19:51	1
Boron	1.1		0.10		mg/L		09/01/23 09:00	09/19/23 17:54	1
Barium	0.037		0.0020		mg/L		09/01/23 09:00	09/15/23 19:51	1
Beryllium	<0.0010		0.0010		mg/L		09/01/23 09:00	09/15/23 19:51	1
Calcium	98		0.50		mg/L		09/01/23 09:00	09/15/23 19:51	1
Cadmium	<0.00020		0.00020		mg/L		09/01/23 09:00	09/15/23 19:51	1
Cobalt	<0.00050		0.00050		mg/L		09/01/23 09:00	09/15/23 19:51	1
Chromium	<0.0050		0.0050		mg/L		09/01/23 09:00	09/15/23 19:51	1
Molybdenum	0.0040		0.0020		mg/L		09/01/23 09:00	09/15/23 19:51	1
Lead	<0.00050		0.00050		mg/L		09/01/23 09:00	09/19/23 17:54	1
Antimony	<0.0020		0.0020		mg/L		09/01/23 09:00	09/19/23 17:54	1
Selenium	<0.0050		0.0050		mg/L		09/01/23 09:00	09/15/23 19:51	1
Thallium	<0.0010		0.0010		mg/L		09/01/23 09:00	09/19/23 17:54	1
Lithium	<0.010		0.010		mg/L		09/01/23 09:00	09/15/23 19:51	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/08/23 10:26	09/11/23 10:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	660		10		mg/L			08/31/23 23:35	1
Chloride (SM 4500 Cl- E)	80		4.0		mg/L			09/12/23 17:05	2
Fluoride (SM 4500 F C)	0.29		0.10		mg/L			09/10/23 12:50	1
Sulfate (SM 4500 SO4 E)	83		10		mg/L			09/20/23 16:45	2

Client Sample Results

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

Job ID: 500-238774-1

Client Sample ID: MW-01
Date Collected: 08/29/23 12:20
Date Received: 08/30/23 10:10

Lab Sample ID: 500-238774-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0020		0.0020		mg/L		09/01/23 09:00	09/15/23 19:55	1
Boron	0.59		0.10		mg/L		09/01/23 09:00	09/19/23 17:56	1
Barium	0.078		0.0020		mg/L		09/01/23 09:00	09/15/23 19:55	1
Beryllium	<0.0010		0.0010		mg/L		09/01/23 09:00	09/15/23 19:55	1
Calcium	100		0.50		mg/L		09/01/23 09:00	09/15/23 19:55	1
Cadmium	<0.00020		0.00020		mg/L		09/01/23 09:00	09/15/23 19:55	1
Cobalt	<0.00050		0.00050		mg/L		09/01/23 09:00	09/15/23 19:55	1
Chromium	<0.0050		0.0050		mg/L		09/01/23 09:00	09/15/23 19:55	1
Molybdenum	0.0020		0.0020		mg/L		09/01/23 09:00	09/15/23 19:55	1
Lead	<0.00050		0.00050		mg/L		09/01/23 09:00	09/19/23 17:56	1
Antimony	<0.0020		0.0020		mg/L		09/01/23 09:00	09/19/23 17:56	1
Selenium	<0.0050		0.0050		mg/L		09/01/23 09:00	09/15/23 19:55	1
Thallium	<0.0010		0.0010		mg/L		09/01/23 09:00	09/19/23 17:56	1
Lithium	<0.010		0.010		mg/L		09/01/23 09:00	09/15/23 19:55	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/08/23 10:26	09/11/23 10:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	530		10		mg/L			08/31/23 23:38	1
Chloride (SM 4500 Cl- E)	47		4.0		mg/L			09/12/23 17:04	2
Fluoride (SM 4500 F C)	<0.10		0.10		mg/L			09/10/23 13:05	1
Sulfate (SM 4500 SO4 E)	43		5.0		mg/L			09/20/23 16:23	1

Client Sample Results

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

Job ID: 500-238774-1

Client Sample ID: MW-10
Date Collected: 08/29/23 13:32
Date Received: 08/30/23 10:10

Lab Sample ID: 500-238774-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0020		0.0020		mg/L		09/01/23 09:00	09/15/23 19:58	1
Boron	1.3		0.10		mg/L		09/01/23 09:00	09/19/23 17:58	1
Barium	0.20		0.0020		mg/L		09/01/23 09:00	09/15/23 19:58	1
Beryllium	<0.0010		0.0010		mg/L		09/01/23 09:00	09/15/23 19:58	1
Calcium	96		0.50		mg/L		09/01/23 09:00	09/15/23 19:58	1
Cadmium	<0.00020		0.00020		mg/L		09/01/23 09:00	09/15/23 19:58	1
Cobalt	0.0042		0.00050		mg/L		09/01/23 09:00	09/15/23 19:58	1
Chromium	<0.0050		0.0050		mg/L		09/01/23 09:00	09/15/23 19:58	1
Molybdenum	<0.0020		0.0020		mg/L		09/01/23 09:00	09/15/23 19:58	1
Lead	0.00083		0.00050		mg/L		09/01/23 09:00	09/19/23 17:58	1
Antimony	<0.0020		0.0020		mg/L		09/01/23 09:00	09/19/23 17:58	1
Selenium	<0.0050		0.0050		mg/L		09/01/23 09:00	09/15/23 19:58	1
Thallium	<0.0010		0.0010		mg/L		09/01/23 09:00	09/19/23 17:58	1
Lithium	<0.010		0.010		mg/L		09/01/23 09:00	09/15/23 19:58	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/08/23 10:26	09/11/23 10:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	510		10		mg/L			08/31/23 23:40	1
Chloride (SM 4500 Cl- E)	56		4.0		mg/L			09/12/23 17:05	2
Fluoride (SM 4500 F C)	0.29		0.10		mg/L			09/10/23 13:10	1
Sulfate (SM 4500 SO4 E)	50		10		mg/L			09/20/23 15:40	2

Client Sample Results

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

Job ID: 500-238774-1

Client Sample ID: Duplicate
Date Collected: 08/29/23 00:00
Date Received: 08/30/23 10:10

Lab Sample ID: 500-238774-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0020		0.0020		mg/L		09/01/23 09:00	09/15/23 20:02	1
Boron	1.3		0.10		mg/L		09/01/23 09:00	09/19/23 18:14	1
Barium	0.19		0.0020		mg/L		09/01/23 09:00	09/15/23 20:02	1
Beryllium	<0.0010		0.0010		mg/L		09/01/23 09:00	09/15/23 20:02	1
Calcium	95		0.50		mg/L		09/01/23 09:00	09/15/23 20:02	1
Cadmium	<0.00020		0.00020		mg/L		09/01/23 09:00	09/15/23 20:02	1
Cobalt	0.0033		0.00050		mg/L		09/01/23 09:00	09/15/23 20:02	1
Chromium	<0.0050		0.0050		mg/L		09/01/23 09:00	09/15/23 20:02	1
Molybdenum	<0.0020		0.0020		mg/L		09/01/23 09:00	09/15/23 20:02	1
Lead	0.00065		0.00050		mg/L		09/01/23 09:00	09/19/23 18:14	1
Antimony	<0.0020		0.0020		mg/L		09/01/23 09:00	09/19/23 18:14	1
Selenium	<0.0050		0.0050		mg/L		09/01/23 09:00	09/15/23 20:02	1
Thallium	<0.0010		0.0010		mg/L		09/01/23 09:00	09/19/23 18:14	1
Lithium	<0.010		0.010		mg/L		09/01/23 09:00	09/15/23 20:02	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		09/08/23 10:26	09/11/23 10:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	490		10		mg/L			08/31/23 23:43	1
Chloride (SM 4500 Cl- E)	56		4.0		mg/L			09/12/23 17:04	2
Fluoride (SM 4500 F C)	0.29		0.10		mg/L			09/10/23 13:15	1
Sulfate (SM 4500 SO4 E)	51		10		mg/L			09/20/23 16:46	2

Definitions/Glossary

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

Job ID: 500-238774-1

Qualifiers

Metals

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

Glossary

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

QC Association Summary

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

Job ID: 500-238774-1

Metals

Prep Batch: 398373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-1	MW-02	Total Recoverable	Water	3005A	
500-238774-2	MW-03	Total Recoverable	Water	3005A	
500-238774-3	MW-04	Total Recoverable	Water	3005A	
500-238774-4	MW-05	Total Recoverable	Water	3005A	
500-238774-5	MW-01	Total Recoverable	Water	3005A	
500-238774-6	MW-10	Total Recoverable	Water	3005A	
500-238774-7	Duplicate	Total Recoverable	Water	3005A	
MB 310-398373/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 310-398373/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-238774-1 MS	MW-02	Total Recoverable	Water	3005A	
500-238774-1 MSD	MW-02	Total Recoverable	Water	3005A	

Prep Batch: 399007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-1	MW-02	Total/NA	Water	7470A	
500-238774-2	MW-03	Total/NA	Water	7470A	
500-238774-3	MW-04	Total/NA	Water	7470A	
500-238774-4	MW-05	Total/NA	Water	7470A	
500-238774-5	MW-01	Total/NA	Water	7470A	
500-238774-6	MW-10	Total/NA	Water	7470A	
500-238774-7	Duplicate	Total/NA	Water	7470A	
MB 310-399007/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-399007/2-A	Lab Control Sample	Total/NA	Water	7470A	
500-238774-2 MS	MW-03	Total/NA	Water	7470A	
500-238774-2 MSD	MW-03	Total/NA	Water	7470A	

Analysis Batch: 399188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-1	MW-02	Total/NA	Water	7470A	399007
500-238774-2	MW-03	Total/NA	Water	7470A	399007
500-238774-3	MW-04	Total/NA	Water	7470A	399007
500-238774-4	MW-05	Total/NA	Water	7470A	399007
500-238774-5	MW-01	Total/NA	Water	7470A	399007
500-238774-6	MW-10	Total/NA	Water	7470A	399007
500-238774-7	Duplicate	Total/NA	Water	7470A	399007
MB 310-399007/1-A	Method Blank	Total/NA	Water	7470A	399007
LCS 310-399007/2-A	Lab Control Sample	Total/NA	Water	7470A	399007
500-238774-2 MS	MW-03	Total/NA	Water	7470A	399007
500-238774-2 MSD	MW-03	Total/NA	Water	7470A	399007

Analysis Batch: 399821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-1	MW-02	Total Recoverable	Water	6020B	398373
500-238774-2	MW-03	Total Recoverable	Water	6020B	398373
500-238774-3	MW-04	Total Recoverable	Water	6020B	398373
500-238774-4	MW-05	Total Recoverable	Water	6020B	398373
500-238774-5	MW-01	Total Recoverable	Water	6020B	398373
500-238774-6	MW-10	Total Recoverable	Water	6020B	398373
500-238774-7	Duplicate	Total Recoverable	Water	6020B	398373
MB 310-398373/1-A	Method Blank	Total Recoverable	Water	6020B	398373
LCS 310-398373/2-A	Lab Control Sample	Total Recoverable	Water	6020B	398373

Eurofins Chicago

QC Association Summary

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

Job ID: 500-238774-1

Metals (Continued)

Analysis Batch: 399821 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-1 MS	MW-02	Total Recoverable	Water	6020B	398373
500-238774-1 MSD	MW-02	Total Recoverable	Water	6020B	398373

Analysis Batch: 400043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-1	MW-02	Total Recoverable	Water	6020B	398373
500-238774-2	MW-03	Total Recoverable	Water	6020B	398373
500-238774-3	MW-04	Total Recoverable	Water	6020B	398373
500-238774-4	MW-05	Total Recoverable	Water	6020B	398373
500-238774-5	MW-01	Total Recoverable	Water	6020B	398373
500-238774-6	MW-10	Total Recoverable	Water	6020B	398373
500-238774-7	Duplicate	Total Recoverable	Water	6020B	398373
MB 310-398373/1-A	Method Blank	Total Recoverable	Water	6020B	398373
LCS 310-398373/2-A	Lab Control Sample	Total Recoverable	Water	6020B	398373
500-238774-1 MS	MW-02	Total Recoverable	Water	6020B	398373
500-238774-1 MSD	MW-02	Total Recoverable	Water	6020B	398373

Analysis Batch: 400290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-1	MW-02	Total Recoverable	Water	6020B	398373
LCS 310-398373/2-A	Lab Control Sample	Total Recoverable	Water	6020B	398373
500-238774-1 MS	MW-02	Total Recoverable	Water	6020B	398373
500-238774-1 MSD	MW-02	Total Recoverable	Water	6020B	398373

General Chemistry

Analysis Batch: 730329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-1	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-238774-2	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-238774-3	MW-04	Total/NA	Water	SM 4500 SO4 E	
MB 500-730329/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
MB 500-730329/55	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-730329/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
LCS 500-730329/59	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-238774-2 MS	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-238774-2 MSD	MW-03	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 730408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-1	MW-02	Total/NA	Water	SM 4500 CI- E	
500-238774-2	MW-03	Total/NA	Water	SM 4500 CI- E	
500-238774-3	MW-04	Total/NA	Water	SM 4500 CI- E	
MB 500-730408/46	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-730408/47	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 730463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-1	MW-02	Total/NA	Water	SM 2540C	
500-238774-2	MW-03	Total/NA	Water	SM 2540C	
500-238774-3	MW-04	Total/NA	Water	SM 2540C	

Eurofins Chicago

QC Association Summary

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

Job ID: 500-238774-1

General Chemistry (Continued)

Analysis Batch: 730463 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-4	MW-05	Total/NA	Water	SM 2540C	
500-238774-5	MW-01	Total/NA	Water	SM 2540C	
500-238774-6	MW-10	Total/NA	Water	SM 2540C	
500-238774-7	Duplicate	Total/NA	Water	SM 2540C	
MB 500-730463/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-730463/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 731562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-1	MW-02	Total/NA	Water	SM 4500 F C	
500-238774-2	MW-03	Total/NA	Water	SM 4500 F C	
500-238774-3	MW-04	Total/NA	Water	SM 4500 F C	
500-238774-4	MW-05	Total/NA	Water	SM 4500 F C	
500-238774-5	MW-01	Total/NA	Water	SM 4500 F C	
500-238774-6	MW-10	Total/NA	Water	SM 4500 F C	
500-238774-7	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-731562/3	Method Blank	Total/NA	Water	SM 4500 F C	
MB 500-731562/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-731562/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCS 500-731562/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-238774-3 MS	MW-04	Total/NA	Water	SM 4500 F C	
500-238774-3 MSD	MW-04	Total/NA	Water	SM 4500 F C	

Analysis Batch: 731959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-4	MW-05	Total/NA	Water	SM 4500 CI- E	
500-238774-5	MW-01	Total/NA	Water	SM 4500 CI- E	
500-238774-6	MW-10	Total/NA	Water	SM 4500 CI- E	
500-238774-7	Duplicate	Total/NA	Water	SM 4500 CI- E	
MB 500-731959/16	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-731959/17	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 733315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-4	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-238774-5	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-238774-6	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-238774-7	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-733315/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
MB 500-733315/88	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-733315/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
LCS 500-733315/89	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

QC Sample Results

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

Job ID: 500-238774-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-398373/1-A
Matrix: Water
Analysis Batch: 399821

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 398373

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.0020		0.0020		mg/L		09/01/23 09:00	09/15/23 18:58	1
Barium	<0.0020		0.0020		mg/L		09/01/23 09:00	09/15/23 18:58	1
Beryllium	<0.0010		0.0010		mg/L		09/01/23 09:00	09/15/23 18:58	1
Calcium	<0.50		0.50		mg/L		09/01/23 09:00	09/15/23 18:58	1
Cadmium	<0.00020		0.00020		mg/L		09/01/23 09:00	09/15/23 18:58	1
Cobalt	<0.00050		0.00050		mg/L		09/01/23 09:00	09/15/23 18:58	1
Chromium	<0.0050		0.0050		mg/L		09/01/23 09:00	09/15/23 18:58	1
Molybdenum	<0.0020		0.0020		mg/L		09/01/23 09:00	09/15/23 18:58	1
Selenium	<0.0050		0.0050		mg/L		09/01/23 09:00	09/15/23 18:58	1
Lithium	<0.010		0.010		mg/L		09/01/23 09:00	09/15/23 18:58	1

Lab Sample ID: MB 310-398373/1-A
Matrix: Water
Analysis Batch: 400043

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 398373

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Boron	<0.10		0.10		mg/L		09/01/23 09:00	09/19/23 17:38	1
Lead	<0.00050		0.00050		mg/L		09/01/23 09:00	09/19/23 17:38	1
Antimony	<0.0020		0.0020		mg/L		09/01/23 09:00	09/19/23 17:38	1
Thallium	<0.0010		0.0010		mg/L		09/01/23 09:00	09/19/23 17:38	1

Lab Sample ID: LCS 310-398373/2-A
Matrix: Water
Analysis Batch: 399821

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 398373

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.100	0.0971		mg/L		97	80 - 120
Beryllium	0.100	0.0938		mg/L		94	80 - 120
Calcium	2.00	1.86		mg/L		93	80 - 120
Cadmium	0.100	0.0926		mg/L		93	80 - 120
Cobalt	0.100	0.0976		mg/L		98	80 - 120
Chromium	0.100	0.0978		mg/L		98	80 - 120
Molybdenum	0.200	0.197		mg/L		99	80 - 120
Selenium	0.400	0.371		mg/L		93	80 - 120
Lithium	0.200	0.192		mg/L		96	80 - 120

Lab Sample ID: LCS 310-398373/2-A
Matrix: Water
Analysis Batch: 400043

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 398373

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.200	0.223		mg/L		111	80 - 120
Antimony	0.200	0.230		mg/L		115	80 - 120

QC Sample Results

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

Job ID: 500-238774-1

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

Lab Sample ID: LCS 310-398373/2-A
Matrix: Water
Analysis Batch: 400290

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 398373

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	0.200	0.175		mg/L		88	80 - 120

Lab Sample ID: 500-238774-1 MS
Matrix: Water
Analysis Batch: 399821

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 398373

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	<0.0020		0.200	0.201		mg/L		100	75 - 125
Barium	0.081		0.100	0.177		mg/L		95	75 - 125
Beryllium	<0.0010		0.100	0.0932		mg/L		93	75 - 125
Calcium	94		2.00	94.7	4	mg/L		36	75 - 125
Cadmium	<0.00020		0.100	0.0959		mg/L		96	75 - 125
Cobalt	<0.00050		0.100	0.0933		mg/L		93	75 - 125
Chromium	<0.0050		0.100	0.0957		mg/L		96	75 - 125
Molybdenum	<0.0020		0.200	0.195		mg/L		97	75 - 125
Selenium	<0.0050		0.400	0.382		mg/L		95	75 - 125
Lithium	<0.010		0.200	0.189		mg/L		91	75 - 125

Lab Sample ID: 500-238774-1 MS
Matrix: Water
Analysis Batch: 400043

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 398373

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	2.7		0.200	2.97	4 *+	mg/L		113	75 - 125
Lead	0.00058		0.200	0.216	*+	mg/L		108	75 - 125
Antimony	<0.0020	F1	0.200	0.246	*+	mg/L		123	75 - 125

Lab Sample ID: 500-238774-1 MS
Matrix: Water
Analysis Batch: 400290

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 398373

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	0.0031	F1	0.200	0.144	F1	mg/L		70	75 - 125

Lab Sample ID: 500-238774-1 MSD
Matrix: Water
Analysis Batch: 399821

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 398373

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	<0.0020		0.200	0.200		mg/L		100	75 - 125	0	20
Barium	0.081		0.100	0.176		mg/L		95	75 - 125	0	20
Beryllium	<0.0010		0.100	0.0936		mg/L		94	75 - 125	0	20
Calcium	94		2.00	95.2	4	mg/L		60	75 - 125	0	20
Cadmium	<0.00020		0.100	0.0951		mg/L		95	75 - 125	1	20
Cobalt	<0.00050		0.100	0.0927		mg/L		93	75 - 125	1	20
Chromium	<0.0050		0.100	0.0960		mg/L		96	75 - 125	0	20
Molybdenum	<0.0020		0.200	0.196		mg/L		97	75 - 125	0	20
Selenium	<0.0050		0.400	0.385		mg/L		95	75 - 125	1	20
Lithium	<0.010		0.200	0.190		mg/L		92	75 - 125	0	20

Eurofins Chicago

QC Sample Results

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

Job ID: 500-238774-1

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

Lab Sample ID: 500-238774-1 MSD
Matrix: Water
Analysis Batch: 400043

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 398373

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Boron	2.7		0.200	2.97	4 *+	mg/L		113	75 - 125	0	20
Lead	0.00058		0.200	0.220	*+	mg/L		110	75 - 125	2	20
Antimony	<0.0020	F1	0.200	0.252	F1 *+	mg/L		126	75 - 125	2	20

Lab Sample ID: 500-238774-1 MSD
Matrix: Water
Analysis Batch: 400290

Client Sample ID: MW-02
Prep Type: Total Recoverable
Prep Batch: 398373

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Thallium	0.0031	F1	0.200	0.152	F1	mg/L		74	75 - 125	5	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-399007/1-A
Matrix: Water
Analysis Batch: 399188

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 399007

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020		mg/L		09/08/23 10:25	09/11/23 10:25	1

Lab Sample ID: LCS 310-399007/2-A
Matrix: Water
Analysis Batch: 399188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 399007

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				Limits
Mercury	0.00167	0.00161		mg/L		97	80 - 120

Lab Sample ID: 500-238774-2 MS
Matrix: Water
Analysis Batch: 399188

Client Sample ID: MW-03
Prep Type: Total/NA
Prep Batch: 399007

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				Limits
Mercury	<0.00020		0.00167	0.00161		mg/L		96	80 - 120

Lab Sample ID: 500-238774-2 MSD
Matrix: Water
Analysis Batch: 399188

Client Sample ID: MW-03
Prep Type: Total/NA
Prep Batch: 399007

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Mercury	<0.00020		0.00167	0.00161		mg/L		96	80 - 120	0	20

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

Lab Sample ID: MB 500-730463/1
Matrix: Water
Analysis Batch: 730463

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			08/31/23 23:07	1

Euofins Chicago

QC Sample Results

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

Job ID: 500-238774-1

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

Lab Sample ID: LCS 500-730463/2
Matrix: Water
Analysis Batch: 730463

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	240		mg/L		96	80 - 120

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-730408/46
Matrix: Water
Analysis Batch: 730408

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			08/31/23 14:31	1

Lab Sample ID: LCS 500-730408/47
Matrix: Water
Analysis Batch: 730408

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	19.7		mg/L		99	85 - 115

Lab Sample ID: MB 500-731959/16
Matrix: Water
Analysis Batch: 731959

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			09/12/23 17:03	1

Lab Sample ID: LCS 500-731959/17
Matrix: Water
Analysis Batch: 731959

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

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-731562/3
Matrix: Water
Analysis Batch: 731562

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			09/10/23 10:16	1

Lab Sample ID: MB 500-731562/31
Matrix: Water
Analysis Batch: 731562

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			09/10/23 12:29	1

QC Sample Results

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

Job ID: 500-238774-1

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 500-731562/32
Matrix: Water
Analysis Batch: 731562

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	10.2		mg/L		102	90 - 119

Lab Sample ID: LCS 500-731562/4
Matrix: Water
Analysis Batch: 731562

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

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

Lab Sample ID: 500-238774-3 MS
Matrix: Water
Analysis Batch: 731562

Client Sample ID: MW-04
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.24		5.00	5.22		mg/L		100	75 - 125

Lab Sample ID: 500-238774-3 MSD
Matrix: Water
Analysis Batch: 731562

Client Sample ID: MW-04
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.24		5.00	5.27		mg/L		101	75 - 125	1	20

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-730329/16
Matrix: Water
Analysis Batch: 730329

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			08/30/23 14:41	1

Lab Sample ID: MB 500-730329/55
Matrix: Water
Analysis Batch: 730329

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			08/30/23 15:07	1

Lab Sample ID: LCS 500-730329/17
Matrix: Water
Analysis Batch: 730329

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

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

QC Sample Results

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

Job ID: 500-238774-1

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

Lab Sample ID: LCS 500-730329/59
Matrix: Water
Analysis Batch: 730329

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	21.0		mg/L		105	88 - 123

Lab Sample ID: 500-238774-2 MS
Matrix: Water
Analysis Batch: 730329

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	36		20.0	56.7		mg/L		101	75 - 125

Lab Sample ID: 500-238774-2 MSD
Matrix: Water
Analysis Batch: 730329

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	36		20.0	55.9		mg/L		97	75 - 125	1	20

Lab Sample ID: MB 500-733315/16
Matrix: Water
Analysis Batch: 733315

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			09/20/23 15:12	1

Lab Sample ID: MB 500-733315/88
Matrix: Water
Analysis Batch: 733315

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			09/20/23 16:22	1

Lab Sample ID: LCS 500-733315/17
Matrix: Water
Analysis Batch: 733315

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	20.0	20.3		mg/L		102	88 - 123

Lab Sample ID: LCS 500-733315/89
Matrix: Water
Analysis Batch: 733315

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	20.0	20.1		mg/L		100	88 - 123

Client Information		Sampler Jack Misner	Lab PM Mockler, Diana J	Carrier Tracking No(s)	COC No: 500-114458-46459 1																																								
Client Contact: Kaelyn Sperle		Phone 202-622-1143	E-Mail Diana.Mockler@et.eurofinsus.com	State of Origin IL	Page: Page 1 of 1																																								
Company KPRG and Associates, Inc.		Analysis Requested			Job #: 500-238774																																								
Address: 14665 West Lisbon Road Suite 1A		Due Date Requested Standard	<table border="1"> <tr><td>Field Filtered Sample (Yes/No)</td><td></td><td></td><td></td><td></td></tr> <tr><td>Performs MS/MSD (Yes or No)</td><td></td><td></td><td></td><td></td></tr> <tr><td>903.0 - Standard Target List</td><td></td><td></td><td></td><td></td></tr> <tr><td>Ra28Ra228, GFPC - Local Method</td><td></td><td></td><td></td><td></td></tr> <tr><td>904.0 - Standard Target List</td><td></td><td></td><td></td><td></td></tr> <tr><td>6020A, 7470A</td><td></td><td></td><td></td><td></td></tr> <tr><td>2840C, 4500_F_C, SM4500_CL_E, SM4500_SO4_E</td><td></td><td></td><td></td><td></td></tr> <tr><td>Total Number of containers</td><td></td><td></td><td></td><td></td></tr> </table>			Field Filtered Sample (Yes/No)					Performs MS/MSD (Yes or No)					903.0 - Standard Target List					Ra28Ra228, GFPC - Local Method					904.0 - Standard Target List					6020A, 7470A					2840C, 4500_F_C, SM4500_CL_E, SM4500_SO4_E					Total Number of containers				
Field Filtered Sample (Yes/No)																																													
Performs MS/MSD (Yes or No)																																													
903.0 - Standard Target List																																													
Ra28Ra228, GFPC - Local Method																																													
904.0 - Standard Target List																																													
6020A, 7470A																																													
2840C, 4500_F_C, SM4500_CL_E, SM4500_SO4_E																																													
Total Number of containers																																													
City Brookfield		TAT Requested (days) Standard																																											
State Zip WI, 53005		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No																																											
Phone 262-781-0475(Tel)		PO #: 4502125100																																											
Email: kaelyns@kprginc.com		WFO #																																											
Project Name: Powerton CCR FAB		Project #: 50011612	Preservation Codes A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Trizma Z - other (specify)																																										
Site: Illinois		SSOW#																																											
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	D	D	D	D	N	Total Number of containers	Special Instructions/Note:																																	
Preservation Codes						X	X	X	X	X	5																																		
MW-02		8/28/23	1055	G	Water	N	N	X	X	X	5																																		
MW-03		8/28/23	1128	G	Water	N	N	X	X	X	5																																		
MW-04		8/28/23	1231	G	Water	N	N	X	X	X	5																																		
					Water																																								
					Water																																								
					Water																																								
					Water																																								
					Water																																								
					Water																																								
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Radiological <input type="checkbox"/> Radiological						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																																							
Deliverable Requested I, II III IV Other (specify)						Special Instructions/QC Requirements Non-hazardous																																							
Empty Kit Relinquished by			Date	Time	Method of Shipment:																																								
Relinquished by <i>John Misner</i>		Date/Time: 8/28/23	1610	Company: KPRG	Received by <i>John Sperle</i>		Date/Time: 8/29/23	1010	Company: EPTA																																				
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			Cooler Temperature(s) °C and Other Remarks 1.8-7/1.5																																								

Eurofins Chicago

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

Chain of Custody Record

MKE 232

Client Information			Sampler <i>Kaelyn Sperle</i>	Lab PM Mockler, Diana J		Carrier Tracking No(s):	COC No: 500-114458-46459 1	
Client Contact Kaelyn Sperle			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:	Analysis Requested			Job # <i>500-238774</i>	
Address 14665 West Lisbon Road, Suite 1A			Due Date Requested <i>Standard</i>	Field Filtered Sample (Yes or No) Particulate MS/MS/SE (Yes or No)	903.0 - Standard Target List Re226Ra228_GFPc - Local Method	904.0 - Standard Target List 6020A, 7470A	2540C, 4500_F_C, SM4500_CL_E, SM4500_SO4_E	Total Number of Containers
City Brookfield		TAT Requested (days) <i>Standard</i>	Special Instructions/Note:					
State, Zip WI, 53005		Compliance Project* <input type="checkbox"/> Yes <input type="checkbox"/> No		Preservation Codes A - HCL M - Hexane B NaOH N - None C - Zn Acetate O - As/NaO2 D - Nitric Acid P Na2O4S E NaHSO4 Q - Na2SO3 F MeOH R - Na2SO4 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 EDTA Y Trizma Z - other (specify)				
Phone 262-781-0475(Tel)		Project #: 50011612	Other:					
Email kaelyns@kprginc.com		SSOW#:	500-238774 COC					
Project Name: Powerton CCR <i>FAB</i>								
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)	Preservation Code							Special Instructions/Note:
					D	D	D	D	D	N		
<i>4 MW-05</i>	<i>8/29/23</i>	<i>0850</i>	<i>G</i>	<i>Water</i>	<i>NN</i>	<i>XX</i>	<i>XX</i>	<i>XX</i>	<i>XX</i>	<i>XX</i>	<i>XX</i>	<i>S</i>
<i>5 MW-01</i>	<i>8/29/23</i>	<i>1220</i>		<i>Water</i>								
<i>6 MW-10</i>	<i>8/29/23</i>	<i>1332</i>		<i>Water</i>								
<i>7 Duplicate</i>	<i>8/29/23</i>	<i>-</i>		<i>Water</i>								
				<i>Water</i>								
				<i>Water</i>								
				<i>Water</i>								
				<i>Water</i>								

Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological			Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Deliverable Requested I, II, III, IV Other (specify)			Special Instructions/QC Requirements			
Empty Kit Relinquished by		Date	Time	Method of Shipment		
Relinquished by <i>Kaelyn Sperle</i>	Date/Time: <i>8/29/23/1720</i>	Company: <i>KPRG</i>	Received by <i>Doni Acott</i>	Date/Time: <i>8/30/23 1010</i>	Company: <i>BETA</i>	
Relinquished by	Date/Time:	Company:	Received by	Date/Time:	Company:	

Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks <i>7.9 -> 8.4</i>
--	-----------------	--

4
5
6
7

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

ORIGIN ID:PIAA (262) 278-1621
KAELYN SPERLE
KPRG AND ASSOCIATES
414 PLAZA DR STE 106

SHIP DATE: 28AUG23
ACTWGT: 59.40 LB
CAD: 6994780/SSFE2422
DIMS: 24x13x14 IN

WESTMONT, IL 60559
UNITED STATES US

BILL THIRD PARTY

Part # 156297-426/MSD28R/GRP 04/24

TO EUROFINS

2417 BOND ST.



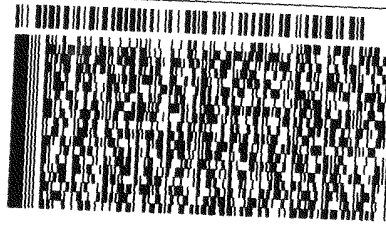
UNIVERSITY PARK IL 60484

500-238774 Waybi

(666) 666-6666
INU:
PO:

REF

DEPT:



RT 519
ST 19

5 A
10:30 4927
08.29

REL#
3785346

1 of 2
TRK# 7830 4006 4927
0201
MASTER

TUE - 29 AUG 10:30A
PRIORITY OVERNIGHT

XN JOTA

AHS
60484
IL-US ORD



7.9.25

ORIGIN ID:PIAA (262) 278-1621
KAEVYN SPERLE
KPRG AND ASSOCIATES
414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

TO EUROFINS CHICAGO

2417 BOND ST.

UNIVERSITY PARK IL 60484

(666) 666-6666
YNU:
PO:

REF:

DEPT:



FedEx
Express



AN 101E70E21E32F

3 of 4

MPS# 7830 9817 4801
0263
Mstr# 7830 9817 4786

0201

WED - 30 AUG 10:30A
PRIORITY OVERNIGHT

AHS

60484

IL-US ORD

XN JOTA



5 10 30 A
4801
116 30

RT 519
ST

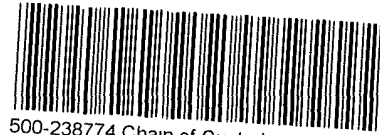
500-238774 Waybr

Part # 156297-438-AH028-690 04/24

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



Environment Testing
America



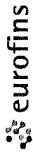
500-238774 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>Chicago</u>			
City/State:	CITY	STATE	Project:
		<u>IL</u>	
Receipt Information			
Date/Time Received:	DATE	TIME	Received By:
	<u>8-31-23</u>	<u>1000</u>	<u>MC</u>
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee			
<input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # _____ of _____	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID:	<u>R</u>	Correction Factor (°C):	<u>0</u>
* Temp Blank Temperature - If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<u>—</u>	Corrected Temp (°C):	<u>—</u>
Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u> <u>250ml plastic</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):	<u>0.7</u>		
Corrected Temp (°C):	<u>0.7</u>		
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			



Chain of Custody Record



Environment Testing



Client Information (Sub Contract Lab)		Sampler: Mockler, Diana J	Lab PM: Mockler, Diana J	Carrier Tracking No(s): 500-178451 1	COC No: 500-178451 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: Eurofins Environment Testing North Cent		Accreditations Required (See note): NELAP - Illinois		Job #: 500-238774-1	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 X - EDTA Y - Trizma Z - other (specify) Other:
Address: 3019 Venture Way,		Due Date Requested: 9/19/2023		Analysis Requested	
City: Cedar Falls		TAT Requested (days):		Total Number of containers	
State, Zip: IA, 50613		PO #:		Perform MS/MSD (Yes or No)	
Phone: 319-277-2401(Tel) 319-277-2425(Fax)		WO #:		Field Filtered Sample (Yes or No)	
Email:		Project #: 50011612		7470A/7470A Prep Mercury	
Powerton CCR FAB		Site: MWG - Powerton		620B/3005A (MOD) 14 Metals	
SSOW#:		Matrix (W-washer, Swab, On-site, BTF, etc., A-AP)		Special Instructions/Note:	
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time	
MW-02 (500-238774-1)		8/28/23		10:55 Central	
MW-03 (500-238774-2)		8/28/23		11:28 Central	
MW-04 (500-238774-3)		8/28/23		12:31 Central	
MW-05 (500-238774-4)		8/29/23		08:50 Central	
MW-01 (500-238774-5)		8/29/23		12:20 Central	
MW-10 (500-238774-6)		8/29/23		13:32 Central	
Duplicate (500-238774-7)		8/29/23		Central	
<p>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/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					
Unconfirmed					
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank 2					
Empty Kit Relinquished by					
Relinquished by: <i>[Signature]</i>		Date/Time: 8/30/23 1510		Company: Company	
Relinquished by:		Date/Time:		Company: Company	
Relinquished by:		Date/Time:		Company: Company	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks.	
<p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</p> <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Special Instructions/QC Requirements					
Method of Shipment:					
Received by: <i>[Signature]</i> Date/Time: 8-31-23 1000 Company: Company					
Received by: Date/Time: Company: Company					
Received by: Date/Time: Company: Company					



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-238774-1

Login Number: 238774

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.	False	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	True	1.5,8.4
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: 500-238774-1

Login Number: 238774

List Number: 4

Creator: Costello, Mackenzie K

List Source: Eurofins Cedar Falls

List Creation: 08/31/23 12:15 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.	True	
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	
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?	False	Received project as a subcontract.
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

Job ID: 500-238774-1

Client Sample ID: MW-02
Date Collected: 08/28/23 10:55
Date Received: 08/29/23 10:10

Lab Sample ID: 500-238774-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			398373	KCK5	EET CF	09/01/23 09:00
Total Recoverable	Analysis	6020B		1	399821	DHM5	EET CF	09/15/23 19:09
Total Recoverable	Prep	3005A			398373	KCK5	EET CF	09/01/23 09:00
Total Recoverable	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 17:43
Total Recoverable	Prep	3005A			398373	KCK5	EET CF	09/01/23 09:00
Total Recoverable	Analysis	6020B		1	400290	A6US	EET CF	09/21/23 14:31
Total/NA	Prep	7470A			399007	NFT2	EET CF	09/08/23 10:26
Total/NA	Analysis	7470A		1	399188	NFT2	EET CF	09/11/23 10:31
Total/NA	Analysis	SM 2540C		1	730463	CLB	EET CHI	08/31/23 23:27
Total/NA	Analysis	SM 4500 CI- E		2	730408	MM	EET CHI	08/31/23 14:34
Total/NA	Analysis	SM 4500 F C		1	731562	EH	EET CHI	09/10/23 12:19
Total/NA	Analysis	SM 4500 SO4 E		2	730329	MM	EET CHI	08/30/23 14:49

Client Sample ID: MW-03
Date Collected: 08/28/23 11:28
Date Received: 08/29/23 10:10

Lab Sample ID: 500-238774-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			398373	KCK5	EET CF	09/01/23 09:00
Total Recoverable	Analysis	6020B		1	399821	DHM5	EET CF	09/15/23 19:44
Total Recoverable	Prep	3005A			398373	KCK5	EET CF	09/01/23 09:00
Total Recoverable	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 17:49
Total/NA	Prep	7470A			399007	NFT2	EET CF	09/08/23 10:26
Total/NA	Analysis	7470A		1	399188	NFT2	EET CF	09/11/23 10:33
Total/NA	Analysis	SM 2540C		1	730463	CLB	EET CHI	08/31/23 23:30
Total/NA	Analysis	SM 4500 CI- E		2	730408	MM	EET CHI	08/31/23 14:34
Total/NA	Analysis	SM 4500 F C		1	731562	EH	EET CHI	09/10/23 12:24
Total/NA	Analysis	SM 4500 SO4 E		2	730329	MM	EET CHI	08/30/23 15:09

Client Sample ID: MW-04
Date Collected: 08/28/23 12:31
Date Received: 08/29/23 10:10

Lab Sample ID: 500-238774-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			398373	KCK5	EET CF	09/01/23 09:00
Total Recoverable	Analysis	6020B		1	399821	DHM5	EET CF	09/15/23 19:48
Total Recoverable	Prep	3005A			398373	KCK5	EET CF	09/01/23 09:00
Total Recoverable	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 17:52
Total/NA	Prep	7470A			399007	NFT2	EET CF	09/08/23 10:26
Total/NA	Analysis	7470A		1	399188	NFT2	EET CF	09/11/23 10:40
Total/NA	Analysis	SM 2540C		1	730463	CLB	EET CHI	08/31/23 23:32
Total/NA	Analysis	SM 4500 CI- E		2	730408	MM	EET CHI	08/31/23 14:35
Total/NA	Analysis	SM 4500 F C		1	731562	EH	EET CHI	09/10/23 12:36
Total/NA	Analysis	SM 4500 SO4 E		5	730329	MM	EET CHI	08/30/23 15:09

Eurofins Chicago

Lab Chronicle

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

Job ID: 500-238774-1

Client Sample ID: MW-05
Date Collected: 08/29/23 08:50
Date Received: 08/30/23 10:10

Lab Sample ID: 500-238774-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			398373	KCK5	EET CF	09/01/23 09:00
Total Recoverable	Analysis	6020B		1	399821	DHM5	EET CF	09/15/23 19:51
Total Recoverable	Prep	3005A			398373	KCK5	EET CF	09/01/23 09:00
Total Recoverable	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 17:54
Total/NA	Prep	7470A			399007	NFT2	EET CF	09/08/23 10:26
Total/NA	Analysis	7470A		1	399188	NFT2	EET CF	09/11/23 10:46
Total/NA	Analysis	SM 2540C		1	730463	CLB	EET CHI	08/31/23 23:35
Total/NA	Analysis	SM 4500 CI- E		2	731959	MM	EET CHI	09/12/23 17:05
Total/NA	Analysis	SM 4500 F C		1	731562	EH	EET CHI	09/10/23 12:50
Total/NA	Analysis	SM 4500 SO4 E		2	733315	TR	EET CHI	09/20/23 16:45

Client Sample ID: MW-01
Date Collected: 08/29/23 12:20
Date Received: 08/30/23 10:10

Lab Sample ID: 500-238774-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			398373	KCK5	EET CF	09/01/23 09:00
Total Recoverable	Analysis	6020B		1	399821	DHM5	EET CF	09/15/23 19:55
Total Recoverable	Prep	3005A			398373	KCK5	EET CF	09/01/23 09:00
Total Recoverable	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 17:56
Total/NA	Prep	7470A			399007	NFT2	EET CF	09/08/23 10:26
Total/NA	Analysis	7470A		1	399188	NFT2	EET CF	09/11/23 10:48
Total/NA	Analysis	SM 2540C		1	730463	CLB	EET CHI	08/31/23 23:38
Total/NA	Analysis	SM 4500 CI- E		2	731959	MM	EET CHI	09/12/23 17:04
Total/NA	Analysis	SM 4500 F C		1	731562	EH	EET CHI	09/10/23 13:05
Total/NA	Analysis	SM 4500 SO4 E		1	733315	TR	EET CHI	09/20/23 16:23

Client Sample ID: MW-10
Date Collected: 08/29/23 13:32
Date Received: 08/30/23 10:10

Lab Sample ID: 500-238774-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			398373	KCK5	EET CF	09/01/23 09:00
Total Recoverable	Analysis	6020B		1	399821	DHM5	EET CF	09/15/23 19:58
Total Recoverable	Prep	3005A			398373	KCK5	EET CF	09/01/23 09:00
Total Recoverable	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 17:58
Total/NA	Prep	7470A			399007	NFT2	EET CF	09/08/23 10:26
Total/NA	Analysis	7470A		1	399188	NFT2	EET CF	09/11/23 10:51
Total/NA	Analysis	SM 2540C		1	730463	CLB	EET CHI	08/31/23 23:40
Total/NA	Analysis	SM 4500 CI- E		2	731959	MM	EET CHI	09/12/23 17:05
Total/NA	Analysis	SM 4500 F C		1	731562	EH	EET CHI	09/10/23 13:10
Total/NA	Analysis	SM 4500 SO4 E		2	733315	TR	EET CHI	09/20/23 15:40

Lab Chronicle

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

Job ID: 500-238774-1

Client Sample ID: Duplicate

Lab Sample ID: 500-238774-7

Date Collected: 08/29/23 00:00

Matrix: Water

Date Received: 08/30/23 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			398373	KCK5	EET CF	09/01/23 09:00
Total Recoverable	Analysis	6020B		1	399821	DHM5	EET CF	09/15/23 20:02
Total Recoverable	Prep	3005A			398373	KCK5	EET CF	09/01/23 09:00
Total Recoverable	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 18:14
Total/NA	Prep	7470A			399007	NFT2	EET CF	09/08/23 10:26
Total/NA	Analysis	7470A		1	399188	NFT2	EET CF	09/11/23 10:53
Total/NA	Analysis	SM 2540C		1	730463	CLB	EET CHI	08/31/23 23:43
Total/NA	Analysis	SM 4500 Cl- E		2	731959	MM	EET CHI	09/12/23 17:04
Total/NA	Analysis	SM 4500 F C		1	731562	EH	EET CHI	09/10/23 13:15
Total/NA	Analysis	SM 4500 SO4 E		2	733315	TR	EET CHI	09/20/23 16:46

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

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: 500-238774-1

Laboratory: Eurofins Chicago

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

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

Laboratory: Eurofins Cedar Falls

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-23
Iowa	State	007	12-01-23
Kansas	NELAP	E-10341	01-31-24
Minnesota	NELAP	019-999-319	12-31-23
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-23
Oregon	NELAP	IA100001	09-29-23





ANALYTICAL REPORT

PREPARED FOR

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

Generated 9/28/2023 8:17:04 AM

JOB DESCRIPTION

Powerton CCR FAB

JOB NUMBER

500-238774-2

Eurofins Chicago

Job Notes

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

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

Authorization



Generated
9/28/2023 8:17:04 AM

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



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	14
QC Association	15
QC Sample Results	16
Chain of Custody	18
Receipt Checklists	24
Chronicle	27
Certification Summary	29
Tracer Carrier Summary	30

Case Narrative

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

Job ID: 500-238774-2

Job ID: 500-238774-2

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-238774-2

Receipt

The samples were received on 8/29/2023 10:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.5° C and 8.4° C.

Receipt Exceptions

The following samples were received at the laboratory outside the required temperature criteria: MW-05 (500-238774-4), MW-01 (500-238774-5), MW-10 (500-238774-6) and Duplicate (500-238774-7).

RAD

Method 903.0: Radium-226 batch 626180

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

MW-02 (500-238774-1), MW-03 (500-238774-2), MW-04 (500-238774-3), (LCS 160-626180/2-A) and (MB 160-626180/1-A)

Method 903.0: Radium-226 batch 626333

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 (500-238774-4), MW-01 (500-238774-5), MW-10 (500-238774-6), Duplicate (500-238774-7), (LCS 160-626333/2-A), (MB 160-626333/1-A), (500-238830-E-4-A) and (500-238830-F-4-A DU)

Method 904.0: Radium-228 prep batch 160-626182:

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MW-02 (500-238774-1), MW-03 (500-238774-2), MW-04 (500-238774-3), (LCS 160-626182/2-A), (MB 160-626182/1-A), (500-238579-T-53-D), (500-238579-T-53-E MS) and (500-238579-T-53-F MSD)

Method 904.0: Radium-228 Prep Batch 160-626334:

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 (500-238774-4), MW-01 (500-238774-5), MW-10 (500-238774-6), Duplicate (500-238774-7), (500-238830-E-4-B) and (500-238830-F-4-B DU)

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: 500-238774-2

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

Job ID: 500-238774-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-238774-1	MW-02	Water	08/28/23 10:55	08/29/23 10:10
500-238774-2	MW-03	Water	08/28/23 11:28	08/29/23 10:10
500-238774-3	MW-04	Water	08/28/23 12:31	08/29/23 10:10
500-238774-4	MW-05	Water	08/29/23 08:50	08/30/23 10:10
500-238774-5	MW-01	Water	08/29/23 12:20	08/30/23 10:10
500-238774-6	MW-10	Water	08/29/23 13:32	08/30/23 10:10
500-238774-7	Duplicate	Water	08/29/23 00:00	08/30/23 10:10

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

Client Sample Results

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

Job ID: 500-238774-2

Client Sample ID: MW-02
Date Collected: 08/28/23 10:55
Date Received: 08/29/23 10:10

Lab Sample ID: 500-238774-1
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.236		0.128	0.129	1.00	0.163	pCi/L	08/31/23 11:10	09/22/23 14:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.1		30 - 110					08/31/23 11:10	09/22/23 14:51	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	-0.0793	U	0.390	0.390	1.00	0.742	pCi/L	08/31/23 11:15	09/18/23 12:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.1		30 - 110					08/31/23 11:15	09/18/23 12:39	1
Y Carrier	80.0		30 - 110					08/31/23 11:15	09/18/23 12:39	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.156	U	0.410	0.411	5.00	0.742	pCi/L		09/26/23 15:36	1

Client Sample Results

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

Job ID: 500-238774-2

Client Sample ID: MW-03
Date Collected: 08/28/23 11:28
Date Received: 08/29/23 10:10

Lab Sample ID: 500-238774-2
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	0.187		0.122	0.123	1.00	0.172	pCi/L	08/31/23 11:10	09/22/23 14:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		30 - 110					08/31/23 11:10	09/22/23 14:51	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	0.217	U	0.393	0.393	1.00	0.674	pCi/L	08/31/23 11:15	09/18/23 12:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		30 - 110					08/31/23 11:15	09/18/23 12:39	1
Y Carrier	78.1		30 - 110					08/31/23 11:15	09/18/23 12:39	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.404	U	0.412	0.412	5.00	0.674	pCi/L		09/26/23 15:36	1

Client Sample Results

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

Job ID: 500-238774-2

Client Sample ID: MW-04
Date Collected: 08/28/23 12:31
Date Received: 08/29/23 10:10

Lab Sample ID: 500-238774-3
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	0.171		0.101	0.102	1.00	0.125	pCi/L	08/31/23 11:10	09/22/23 14:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.3		30 - 110					08/31/23 11:10	09/22/23 14:51	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	0.474	U	0.422	0.424	1.00	0.669	pCi/L	08/31/23 11:15	09/18/23 12:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.3		30 - 110					08/31/23 11:15	09/18/23 12:39	1
Y Carrier	84.5		30 - 110					08/31/23 11:15	09/18/23 12:39	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.645	U	0.434	0.436	5.00	0.669	pCi/L		09/26/23 15:36	1

Client Sample Results

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

Job ID: 500-238774-2

Client Sample ID: MW-05

Lab Sample ID: 500-238774-4

Date Collected: 08/29/23 08:50

Matrix: Water

Date Received: 08/30/23 10:10

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	0.0257	U	0.0601	0.0601	1.00	0.112	pCi/L	09/01/23 09:04	09/26/23 09:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		30 - 110					09/01/23 09:04	09/26/23 09:10	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.792		0.416	0.422	1.00	0.595	pCi/L	09/01/23 09:09	09/21/23 12:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		30 - 110					09/01/23 09:09	09/21/23 12:05	1
Y Carrier	87.1		30 - 110					09/01/23 09:09	09/21/23 12:05	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	0.817		0.420	0.426	5.00	0.595	pCi/L		09/27/23 17:03	1

Client Sample Results

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

Job ID: 500-238774-2

Client Sample ID: MW-01

Lab Sample ID: 500-238774-5

Date Collected: 08/29/23 12:20

Matrix: Water

Date Received: 08/30/23 10:10

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	0.0453	U	0.0714	0.0715	1.00	0.124	pCi/L	09/01/23 09:04	09/26/23 09:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		30 - 110					09/01/23 09:04	09/26/23 09:10	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0702	U	0.300	0.301	1.00	0.574	pCi/L	09/01/23 09:09	09/21/23 12:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		30 - 110					09/01/23 09:09	09/21/23 12:05	1
Y Carrier	88.6		30 - 110					09/01/23 09:09	09/21/23 12:05	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	-0.0249	U	0.308	0.309	5.00	0.574	pCi/L		09/27/23 17:03	1

Client Sample Results

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

Job ID: 500-238774-2

Client Sample ID: MW-10
Date Collected: 08/29/23 13:32
Date Received: 08/30/23 10:10

Lab Sample ID: 500-238774-6
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	0.325		0.139	0.142	1.00	0.146	pCi/L	09/01/23 09:04	09/26/23 09:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		30 - 110					09/01/23 09:04	09/26/23 09:10	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.241	U	0.392	0.392	1.00	0.667	pCi/L	09/01/23 09:09	09/21/23 12:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		30 - 110					09/01/23 09:09	09/21/23 12:05	1
Y Carrier	92.3		30 - 110					09/01/23 09:09	09/21/23 12:05	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	0.565	U	0.416	0.417	5.00	0.667	pCi/L		09/27/23 17:03	1

Client Sample Results

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

Job ID: 500-238774-2

Client Sample ID: Duplicate
Date Collected: 08/29/23 00:00
Date Received: 08/30/23 10:10

Lab Sample ID: 500-238774-7
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	0.258		0.135	0.137	1.00	0.161	pCi/L	09/01/23 09:04	09/26/23 09:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		30 - 110					09/01/23 09:04	09/26/23 09:10	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.272	U	0.426	0.427	1.00	0.724	pCi/L	09/01/23 09:09	09/21/23 12:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		30 - 110					09/01/23 09:09	09/21/23 12:05	1
Y Carrier	87.1		30 - 110					09/01/23 09:09	09/21/23 12:05	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	0.530	U	0.447	0.448	5.00	0.724	pCi/L		09/27/23 17:03	1

Definitions/Glossary

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

Job ID: 500-238774-2

Qualifiers

Rad

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

Glossary

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

QC Association Summary

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

Job ID: 500-238774-2

Rad

Prep Batch: 626180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-1	MW-02	Total/NA	Water	PrecSep-21	
500-238774-2	MW-03	Total/NA	Water	PrecSep-21	
500-238774-3	MW-04	Total/NA	Water	PrecSep-21	
MB 160-626180/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-626180/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 626182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-1	MW-02	Total/NA	Water	PrecSep_0	
500-238774-2	MW-03	Total/NA	Water	PrecSep_0	
500-238774-3	MW-04	Total/NA	Water	PrecSep_0	
MB 160-626182/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-626182/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 626333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-4	MW-05	Total/NA	Water	PrecSep-21	
500-238774-5	MW-01	Total/NA	Water	PrecSep-21	
500-238774-6	MW-10	Total/NA	Water	PrecSep-21	
500-238774-7	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-626333/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-626333/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 626334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-238774-4	MW-05	Total/NA	Water	PrecSep_0	
500-238774-5	MW-01	Total/NA	Water	PrecSep_0	
500-238774-6	MW-10	Total/NA	Water	PrecSep_0	
500-238774-7	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-626334/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-626334/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

QC Sample Results

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

Job ID: 500-238774-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-626180/1-A
Matrix: Water
Analysis Batch: 629275

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 626180

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.02184	U	0.0535	0.0535	1.00	0.128	pCi/L	08/31/23 11:10	09/22/23 14:34	1
Carrier	MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	MB Qualifier	30 - 110					08/31/23 11:10	09/22/23 14:34	1

Lab Sample ID: LCS 160-626180/2-A
Matrix: Water
Analysis Batch: 629275

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 626180

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	10.99		1.18	1.00	0.129	pCi/L	97	75 - 125
Carrier	LCS	LCS	Limits						
Ba Carrier	%Yield	Qualifier	30 - 110						
	94.0								

Lab Sample ID: MB 160-626333/1-A
Matrix: Water
Analysis Batch: 629618

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 626333

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.04398	U	0.0696	0.0697	1.00	0.121	pCi/L	09/01/23 09:04	09/26/23 08:59	1
Carrier	MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	MB Qualifier	30 - 110					09/01/23 09:04	09/26/23 08:59	1
	89.1									

Lab Sample ID: LCS 160-626333/2-A
Matrix: Water
Analysis Batch: 629620

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 626333

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	10.26		1.10	1.00	0.144	pCi/L	91	75 - 125
Carrier	LCS	LCS	Limits						
Ba Carrier	%Yield	Qualifier	30 - 110						
	93.8								

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-626182/1-A
Matrix: Water
Analysis Batch: 628632

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 626182

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.08319	U	0.303	0.304	1.00	0.545	pCi/L	08/31/23 11:15	09/18/23 12:29	1

Eurofins Chicago

QC Sample Results

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

Job ID: 500-238774-2

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

Carrier	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Yield	Qualifier				
Ba Carrier	94.8		30 - 110	08/31/23 11:15	09/18/23 12:29	1
Y Carrier	90.8		30 - 110	08/31/23 11:15	09/18/23 12:29	1

Lab Sample ID: LCS 160-626182/2-A
Matrix: Water
Analysis Batch: 628632

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 626182

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

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	94.0		30 - 110
Y Carrier	81.5		30 - 110

Lab Sample ID: MB 160-626334/1-A
Matrix: Water
Analysis Batch: 629177

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 626334

Analyte	MB MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.1357	U	0.341	0.341	1.00	0.598	pCi/L	09/01/23 09:09	09/21/23 11:55	1

Carrier	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Yield	Qualifier				
Ba Carrier	89.1		30 - 110	09/01/23 09:09	09/21/23 11:55	1
Y Carrier	90.1		30 - 110	09/01/23 09:09	09/21/23 11:55	1

Lab Sample ID: LCS 160-626334/2-A
Matrix: Water
Analysis Batch: 629177

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 626334

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

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	93.8		30 - 110
Y Carrier	88.6		30 - 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 | Environment Testing

Client Information		Sampler <i>Jack Misner</i>	Lab PM Mockler, Diana J	Carrier Tracking No(s)	COC No: 500-114458-46459 1																										
Client Contact: Kaelyn Sperle		Phone <i>202-622-1143</i>	E-Mail Diana.Mockler@et.eurofinsus.com	State of Origin <i>IL</i>	Page: Page 1 of 1																										
Company KPRG and Associates, Inc.		PWSID	Analysis Requested																												
Address: 14665 West Lisbon Road Suite 1A		Due Date Requested <i>Standard</i>	<table border="1"> <tr><td>Field Filtered Sample (Yes/No)</td><td></td></tr> <tr><td>Perform MS/MSD (Yes or No)</td><td></td></tr> <tr><td>903.0 - Standard Target List</td><td></td></tr> <tr><td>Ra28Ra228, GFPC - Local Method</td><td></td></tr> <tr><td>904.0 - Standard Target List</td><td></td></tr> <tr><td>6020A, 7470A</td><td></td></tr> <tr><td>2840C, 4500_F_C, SM4500_Cl_E, SM4500_SO4_E</td><td></td></tr> </table>			Field Filtered Sample (Yes/No)		Perform MS/MSD (Yes or No)		903.0 - Standard Target List		Ra28Ra228, GFPC - Local Method		904.0 - Standard Target List		6020A, 7470A		2840C, 4500_F_C, SM4500_Cl_E, SM4500_SO4_E													
Field Filtered Sample (Yes/No)																															
Perform MS/MSD (Yes or No)																															
903.0 - Standard Target List																															
Ra28Ra228, GFPC - Local Method																															
904.0 - Standard Target List																															
6020A, 7470A																															
2840C, 4500_F_C, SM4500_Cl_E, SM4500_SO4_E																															
City Brookfield		TAT Requested (days) <i>Standard</i>																													
State Zip WI, 53005		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No																													
Phone: 262-781-0475(Tel)		PO #: 4502125100																													
Email: kaelyns@kprginc.com		WFO #																													
Project Name: Powerton CCR <i>FAB</i>		Project #: 50011612	Preservation Codes																												
Site: Illinois		SSOW#:	<table border="0"> <tr><td>A - HCL</td><td>M - Hexane</td></tr> <tr><td>B - NaOH</td><td>N - None</td></tr> <tr><td>C - Zn Acetate</td><td>O - AsNaO2</td></tr> <tr><td>D - Nitric Acid</td><td>P - Na2O4S</td></tr> <tr><td>E - NaHSO4</td><td>Q - Na2SO3</td></tr> <tr><td>F - MeOH</td><td>R - Na2S2O3</td></tr> <tr><td>G - Amchlor</td><td>S - H2SO4</td></tr> <tr><td>H - Ascorbic Acid</td><td>T - TSP Dodecahydrate</td></tr> <tr><td>I - Ice</td><td>U - Acetone</td></tr> <tr><td>J - DI Water</td><td>V - MCAA</td></tr> <tr><td>K - EDTA</td><td>W - pH 4-5</td></tr> <tr><td>L - EDA</td><td>Y - Trizma</td></tr> <tr><td></td><td>Z - other (specify)</td></tr> </table>			A - HCL	M - Hexane	B - NaOH	N - None	C - Zn Acetate	O - AsNaO2	D - Nitric Acid	P - Na2O4S	E - NaHSO4	Q - Na2SO3	F - MeOH	R - Na2S2O3	G - Amchlor	S - H2SO4	H - Ascorbic Acid	T - TSP Dodecahydrate	I - Ice	U - Acetone	J - DI Water	V - MCAA	K - EDTA	W - pH 4-5	L - EDA	Y - Trizma		Z - other (specify)
A - HCL	M - Hexane																														
B - NaOH	N - None																														
C - Zn Acetate	O - AsNaO2																														
D - Nitric Acid	P - Na2O4S																														
E - NaHSO4	Q - Na2SO3																														
F - MeOH	R - Na2S2O3																														
G - Amchlor	S - H2SO4																														
H - Ascorbic Acid	T - TSP Dodecahydrate																														
I - Ice	U - Acetone																														
J - DI Water	V - MCAA																														
K - EDTA	W - pH 4-5																														
L - EDA	Y - Trizma																														
	Z - other (specify)																														
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/No)	Perform MS/MSD (Yes or No)	903.0 - Standard Target List	Ra28Ra228, GFPC - Local Method	904.0 - Standard Target List	6020A, 7470A	2840C, 4500_F_C, SM4500_Cl_E, SM4500_SO4_E	Total Number of Containers	Special Instructions/Note:																	
<i>1</i> <i>2</i> <i>3</i>		<i>8/28/23</i>	<i>1055</i>	<i>G</i>	Water	<i>NN</i>		<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>		<i>S</i>																	
		<i>8/28/23</i>	<i>1128</i>	<i>G</i>	Water	<i>NN</i>		<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>		<i>S</i>																	
		<i>8/28/23</i>	<i>1231</i>	<i>G</i>	Water	<i>NN</i>		<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>		<i>S</i>																	
					Water																										
					Water																										
					Water																										
					Water																										
					Water																										
Possible Hazard Identification		<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Radioactive <input type="checkbox"/> Radiological			Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)																										
Deliverable Requested I, II III IV Other (specify)					<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																										
					Special Instructions/QC Requirements <i>Non-hazardous</i>																										
Empty Kit Relinquished by		Date	Time	Method of Shipment:																											
Relinquished by <i>Jack Misner</i>		Date/Time: <i>8/28/23 1610</i>	Company <i>KPRG</i>	Received by <i>Shirley Smith</i>			Date/Time: <i>8/29/23 1010</i>	Company <i>EPA</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			Cooler Temperature(s) °C and Other Remarks <i>1.8-7/1.5</i>																										

Eurofins Chicago

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

Chain of Custody Record

MKE 232



Client Information				Sampler Kaelyn Sperle		Lab PM Mockler, Diana J		Carrier Tracking No(s):		COC No: 500-114458-46459 1							
Client Contact Kaelyn Sperle				Phone 262-278-1621		E-Mail Diana.Mockler@et.eurofins.com		State of Origin. IL		Page: Page 1 of 1							
Company KPRG and Associates Inc.				PWSID:		Analysis Requested											
Address: 14665 West Lisbon Road, Suite 1A				Due Date Requested Standard								Field Filtered Samples (Yes or No) Petrochem MSMSL (Yes or No)		903.0 - Standard Target List Re226Ra228_GPPC - Local Method 904.0 - Standard Target List 6020A, 7470A 2540C, 4500_F_C, SIM4500_CL_E, SIM4500_SO4_E		Total Number of Containers	
City Brookfield				TAT Requested (days) Standard													
State, Zip WI, 53005				Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No													
Phone 262-781-0475(Tel)				PO #: 4502125100													
Email kaelyns@kprginc.com				WO #:													
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, BT=Tissue, A=Air)							Special Instructions/Note:					
						Preservation Code: D D D D N											
4	MW-05	8/29/23	0850	G	Water	N	N	X	X	X	X	X	5				
5	MW-01	8/29/23	1220		Water												
6	MW-10	8/29/23	1332		Water												
7	Duplicate	8/29/23	-		Water												
					Water												
					Water												
					Water												
					Water												

Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Deliverable Requested I, II, III, IV Other (specify)					Special Instructions/QC Requirements							
Empty Kit Relinquished by			Date		Time			Method of Shipment				
Relinquished by <i>Kaelyn Sperle</i>			Date/Time: 8/29/23/1720		Company KPRG			Received by <i>Shirley Smith</i>		Date/Time: 8/30/23 1010		Company BETA
Relinquished by			Date/Time		Company			Received by		Date/Time		Company
Relinquished by			Date/Time		Company			Received by		Date/Time		Company
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No			Cooler Temperature(s) °C and Other Remarks 7.9 → 8.4							

ORIGIN ID:PIAA (262) 278-1621
KAEALYN SPERLE
KPRG AND ASSOCIATES
414 PLAZA DR STE 106

SHIP DATE: 28AUG23
ACTWGT: 59.40 LB
CAD: 6994780/SSFE2422
DIMS: 24x13x14 IN

WESTMONT, IL 60559
UNITED STATES US

BILL THIRD PARTY

Part # 156297-426/MSD28R/GRP 04/24

TO EUROFINS

2417 BOND ST.



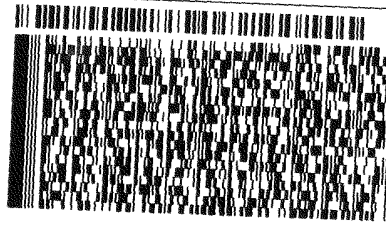
UNIVERSITY PARK IL 60484

500-238774 Waybi

(666) 666-6666
INU:
PO:

REF

DEPT:



RT 519
ST 19

5 10:30 A
4927
08.29

REL#
3785346

1 of 2
TRK# 7830 4006 4927
0201
MASTER

TUE - 29 AUG 10:30A
PRIORITY OVERNIGHT

XN JOTA

AHS
60484
IL-US ORD



7.9.25

ORIGIN ID:PIAA (262) 278-1621
KAEVYN SPERLE
KPRG AND ASSOCIATES
414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

TO EUROFINS CHICAGO

2417 BOND ST.

UNIVERSITY PARK IL 60484

(666) 666-6666
YNU:
PO:

REF:

DEPT:



FedEx
Express



3 of 4

MPS# 7830 9817 4801
0263

Mstr# 7830 9817 4786

0201

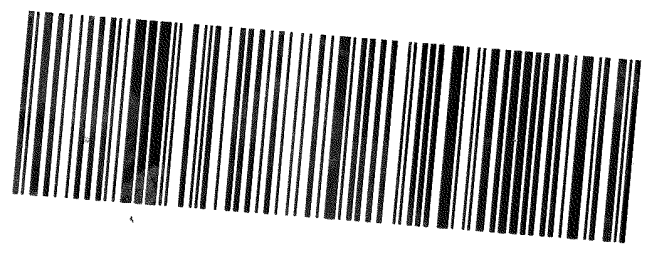
WED - 30 AUG 10:30A
PRIORITY OVERNIGHT

XN JOTA

AHS

60484

IL-US ORD



5 10 30 A
4801
116 30

RT 519
ST

500-238774 Waybr

Part # 156297-438-AH028-690 04/24

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

Chain of Custody Record



Client Information (Sub Contract Lab)
 Client Contact: Mockler, Diana J
 Shipping/Receiving: Diana.Mockler@et.eurofins.com
 Company: TestAmerica Laboratories, Inc.
 Address: 13715 Rider Trail North, IL
 City: Earth City, MO, 63045
 State, Zip: 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
Camper Tracking No(s):
State of Origin: Illinois
Due Date Requested: 9/19/2023
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 (Water, Solid, Swab, Oil, Tissue, Air)	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	Analysis Requested		Special Instructions/Note:
										Analysis Requested	Total Number of Containers	
MW-02 (500-238774-1)	8/28/23	10:55 Central	Water			X	X	X				Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-03 (500-238774-2)	8/28/23	11:28 Central	Water			X	X	X				Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no
MW-04 (500-238774-3)	8/28/23	12:31 Central	Water			X	X	X				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/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) [Blank]
 Primary Deliverable Rank: 2
 Empty Kit Relinquished by: [Blank]
 Date: [Blank]
 Relinquished by: Stephanie Henderson
 Date/Time: 8/19/23 1500
 Relinquished by: Diana Sharkey
 Date/Time: 8/20/23 0900
 Relinquished by: [Blank]
 Date/Time: [Blank]

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For [Blank] Months
 Special Instructions/QC Requirements:
 Method of Shipment: [Blank]
 Received by: [Blank] Date/Time: [Blank]
 Received by: Diana Sharkey - Jangalea Date/Time: 8/20/23 0900
 Received by: [Blank] Date/Time: [Blank]
 Custody Seals Intact: [Blank] Custody Seal No.: [Blank]

Cooler Temperature(s) °C and Other Remarks:

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

Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Mockler, Diana J	Camer Tracking No(s): 500-178471.1							
Client Contact: Shipping/Receiving		E-Mail: Diana.Mockler@et.eurofins.com	Page: Page 1 of 1							
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois								
Address: 13715 Rider Trail North, Earth City, MO, 63045		State of Origin: Illinois								
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		Job #: 500-238774-2								
Email:		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Niirc Acid R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify) Other:								
Due Date Requested: 9/19/2023		Analysis Requested								
TAT Requested (days):										
PO #:		Total Number of Containers								
WO #:										
Project #: 50011612		Special Instructions/Note:								
SSOW#:										
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=organic, B=biotope, A=air)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPc
MW-05 (500-238774-4)	8/29/23	08:50 Central		Water		X	X	X	X	
MW-01 (500-238774-5)	8/29/23	12:20 Central		Water		X	X	X	X	
MW-10 (500-238774-6)	8/29/23	13:32 Central		Water		X	X	X	X	
Duplicate (500-238774-7)	8/29/23	Central		Water		X	X	X	X	
<p>Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 Empty Kit Relinquished by: Date: 8/30/23 1510 Relinquished by: <i>[Signature]</i> Date: 8/30/23 1510 Relinquished by: <i>[Signature]</i> Date: 8/30/23 1510 Relinquished by: <i>[Signature]</i> Date: 8/30/23 1510</p>										
<p>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 Special Instructions/QC Requirements:</p>										
<p>Method of Shipment: Date/Time: Received by: <i>Fedex</i> Date/Time: Received by: <i>M. Pinotto</i> Date/Time: Received by: <i>M. Pinotto</i> Date/Time: AUG 31 2023 0855</p>										
<p>Cooler Temperature(s) °C and Other Remarks:</p>										



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-238774-2

Login Number: 238774

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.	False	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	True	1.5,8.4
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: 500-238774-2

Login Number: 238774

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 08/30/23 01:00 PM

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



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-238774-2

Login Number: 238774

List Number: 3

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 08/31/23 12:07 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.	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 FAB

Job ID: 500-238774-2

Client Sample ID: MW-02
Date Collected: 08/28/23 10:55
Date Received: 08/29/23 10:10

Lab Sample ID: 500-238774-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			626180	KAC	EET SL	08/31/23 11:10
Total/NA	Analysis	903.0		1	629280	SCB	EET SL	09/22/23 14:51
Total/NA	Prep	PrecSep_0			626182	KAC	EET SL	08/31/23 11:15
Total/NA	Analysis	904.0		1	628634	SCB	EET SL	09/18/23 12:39
Total/NA	Analysis	Ra226_Ra228		1	629683	SCB	EET SL	09/26/23 15:36

Client Sample ID: MW-03
Date Collected: 08/28/23 11:28
Date Received: 08/29/23 10:10

Lab Sample ID: 500-238774-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			626180	KAC	EET SL	08/31/23 11:10
Total/NA	Analysis	903.0		1	629280	SCB	EET SL	09/22/23 14:51
Total/NA	Prep	PrecSep_0			626182	KAC	EET SL	08/31/23 11:15
Total/NA	Analysis	904.0		1	628634	SCB	EET SL	09/18/23 12:39
Total/NA	Analysis	Ra226_Ra228		1	629683	SCB	EET SL	09/26/23 15:36

Client Sample ID: MW-04
Date Collected: 08/28/23 12:31
Date Received: 08/29/23 10:10

Lab Sample ID: 500-238774-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			626180	KAC	EET SL	08/31/23 11:10
Total/NA	Analysis	903.0		1	629280	SCB	EET SL	09/22/23 14:51
Total/NA	Prep	PrecSep_0			626182	KAC	EET SL	08/31/23 11:15
Total/NA	Analysis	904.0		1	628634	SCB	EET SL	09/18/23 12:39
Total/NA	Analysis	Ra226_Ra228		1	629683	SCB	EET SL	09/26/23 15:36

Client Sample ID: MW-05
Date Collected: 08/29/23 08:50
Date Received: 08/30/23 10:10

Lab Sample ID: 500-238774-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			626333	KAC	EET SL	09/01/23 09:04
Total/NA	Analysis	903.0		1	629621	FLC	EET SL	09/26/23 09:10
Total/NA	Prep	PrecSep_0			626334	KAC	EET SL	09/01/23 09:09
Total/NA	Analysis	904.0		1	629183	FLC	EET SL	09/21/23 12:05
Total/NA	Analysis	Ra226_Ra228		1	629878	SCB	EET SL	09/27/23 17:03

Lab Chronicle

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

Job ID: 500-238774-2

Client Sample ID: MW-01

Date Collected: 08/29/23 12:20

Date Received: 08/30/23 10:10

Lab Sample ID: 500-238774-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			626333	KAC	EET SL	09/01/23 09:04
Total/NA	Analysis	903.0		1	629621	FLC	EET SL	09/26/23 09:10
Total/NA	Prep	PrecSep_0			626334	KAC	EET SL	09/01/23 09:09
Total/NA	Analysis	904.0		1	629183	FLC	EET SL	09/21/23 12:05
Total/NA	Analysis	Ra226_Ra228		1	629878	SCB	EET SL	09/27/23 17:03

Client Sample ID: MW-10

Date Collected: 08/29/23 13:32

Date Received: 08/30/23 10:10

Lab Sample ID: 500-238774-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			626333	KAC	EET SL	09/01/23 09:04
Total/NA	Analysis	903.0		1	629621	FLC	EET SL	09/26/23 09:10
Total/NA	Prep	PrecSep_0			626334	KAC	EET SL	09/01/23 09:09
Total/NA	Analysis	904.0		1	629183	FLC	EET SL	09/21/23 12:05
Total/NA	Analysis	Ra226_Ra228		1	629878	SCB	EET SL	09/27/23 17:03

Client Sample ID: Duplicate

Date Collected: 08/29/23 00:00

Date Received: 08/30/23 10:10

Lab Sample ID: 500-238774-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			626333	KAC	EET SL	09/01/23 09:04
Total/NA	Analysis	903.0		1	629621	FLC	EET SL	09/26/23 09:10
Total/NA	Prep	PrecSep_0			626334	KAC	EET SL	09/01/23 09:09
Total/NA	Analysis	904.0		1	629183	FLC	EET SL	09/21/23 12:05
Total/NA	Analysis	Ra226_Ra228		1	629878	SCB	EET SL	09/27/23 17:03

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

Job ID: 500-238774-2

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 FAB

Job ID: 500-238774-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)
500-238774-1	MW-02	87.1
500-238774-2	MW-03	96.5
500-238774-3	MW-04	89.3
500-238774-4	MW-05	92.3
500-238774-5	MW-01	93.8
500-238774-6	MW-10	102
500-238774-7	Duplicate	93.5
LCS 160-626180/2-A	Lab Control Sample	94.0
LCS 160-626333/2-A	Lab Control Sample	93.8
MB 160-626180/1-A	Method Blank	94.8
MB 160-626333/1-A	Method Blank	89.1

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
500-238774-1	MW-02	87.1	80.0
500-238774-2	MW-03	96.5	78.1
500-238774-3	MW-04	89.3	84.5
500-238774-4	MW-05	92.3	87.1
500-238774-5	MW-01	93.8	88.6
500-238774-6	MW-10	102	92.3
500-238774-7	Duplicate	93.5	87.1
LCS 160-626182/2-A	Lab Control Sample	94.0	81.5
LCS 160-626334/2-A	Lab Control Sample	93.8	88.6
MB 160-626182/1-A	Method Blank	94.8	90.8
MB 160-626334/1-A	Method Blank	89.1	90.1

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 11/30/2023 1:50:26 PM

JOB DESCRIPTION

Powerton CCR FAB

JOB NUMBER

500-242217-1

Eurofins Chicago

Job Notes

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

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

Authorization



Generated
11/30/2023 1:50:26 PM

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



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	14
QC Association	15
QC Sample Results	18
Chain of Custody	21
Receipt Checklists	23
Chronicle	24
Certification Summary	27

Case Narrative

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

Job ID: 500-242217-1

Job ID: 500-242217-1

Laboratory: Eurofins Chicago

Narrative

**Job Narrative
500-242217-1**

Receipt

The samples were received on 11/8/2023 9:55 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 2.5° C and 4.0° C.

Metals

Method 6020B: The continuing calibration verification (CCV) associated with batch 744190 recovered above the upper control limit for Li. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

General Chemistry

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

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

Method Summary

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

Job ID: 500-242217-1

Method	Method Description	Protocol	Laboratory
6020B	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: 500-242217-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-242217-1	MW-01	Water	11/07/23 15:54	11/08/23 09:55
500-242217-2	MW-02	Water	11/07/23 09:03	11/08/23 09:55
500-242217-3	MW-03	Water	11/07/23 10:23	11/08/23 09:55
500-242217-4	MW-04	Water	11/07/23 12:15	11/08/23 09:55
500-242217-5	MW-05	Water	11/07/23 12:08	11/08/23 09:55
500-242217-6	MW-10	Water	11/07/23 14:56	11/08/23 09:55
500-242217-7	Duplicate	Water	11/07/23 00:00	11/08/23 09:55

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

Client Sample Results

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

Job ID: 500-242217-1

Client Sample ID: MW-01

Lab Sample ID: 500-242217-1

Date Collected: 11/07/23 15:54

Matrix: Water

Date Received: 11/08/23 09:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/17/23 09:13	11/29/23 01:37	1
Arsenic	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 16:02	1
Barium	0.090		0.0025		mg/L		11/17/23 09:13	11/29/23 01:37	1
Beryllium	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 01:37	1
Boron	0.45		0.050		mg/L		11/17/23 09:13	11/29/23 16:02	1
Cadmium	<0.00050		0.00050		mg/L		11/17/23 09:13	11/29/23 01:37	1
Calcium	110		0.20		mg/L		11/17/23 09:13	11/29/23 01:37	1
Chromium	<0.0050		0.0050		mg/L		11/17/23 09:13	11/29/23 01:37	1
Cobalt	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 01:37	1
Lead	<0.00050		0.00050		mg/L		11/17/23 09:13	11/29/23 01:37	1
Lithium	<0.010	^+	0.010		mg/L		11/17/23 09:13	11/29/23 01:37	1
Molybdenum	<0.0050		0.0050		mg/L		11/17/23 09:13	11/29/23 01:37	1
Selenium	0.0026		0.0025		mg/L		11/17/23 09:13	11/29/23 01:37	1
Thallium	<0.0020		0.0020		mg/L		11/17/23 09:13	11/29/23 01:37	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/20/23 13:30	11/21/23 08:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	590		10		mg/L			11/09/23 01:40	1
Chloride (SM 4500 Cl- E)	50		2.0		mg/L			11/15/23 15:18	1
Fluoride (SM 4500 F C)	<0.10		0.10		mg/L			11/16/23 14:33	1
Sulfate (SM 4500 SO4 E)	68		10		mg/L			11/28/23 11:24	2

Client Sample Results

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

Job ID: 500-242217-1

Client Sample ID: MW-02

Lab Sample ID: 500-242217-2

Date Collected: 11/07/23 09:03

Matrix: Water

Date Received: 11/08/23 09:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/17/23 09:13	11/29/23 01:40	1
Arsenic	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 16:06	1
Barium	0.10		0.0025		mg/L		11/17/23 09:13	11/29/23 01:40	1
Beryllium	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 01:40	1
Boron	3.6		0.050		mg/L		11/17/23 09:13	11/29/23 16:06	1
Cadmium	<0.00050		0.00050		mg/L		11/17/23 09:13	11/29/23 01:40	1
Calcium	120		0.20		mg/L		11/17/23 09:13	11/29/23 01:40	1
Chromium	<0.0050		0.0050		mg/L		11/17/23 09:13	11/29/23 01:40	1
Cobalt	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 01:40	1
Lead	<0.00050		0.00050		mg/L		11/17/23 09:13	11/29/23 01:40	1
Lithium	<0.010	^+	0.010		mg/L		11/17/23 09:13	11/29/23 01:40	1
Molybdenum	<0.0050		0.0050		mg/L		11/17/23 09:13	11/29/23 01:40	1
Selenium	0.0026		0.0025		mg/L		11/17/23 09:13	11/29/23 01:40	1
Thallium	<0.0020		0.0020		mg/L		11/17/23 09:13	11/29/23 01:40	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/20/23 13:30	11/21/23 08:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	680		10		mg/L			11/09/23 01:43	1
Chloride (SM 4500 Cl- E)	45		2.0		mg/L			11/15/23 15:18	1
Fluoride (SM 4500 F C)	0.15		0.10		mg/L			11/16/23 14:38	1
Sulfate (SM 4500 SO4 E)	170		50		mg/L			11/28/23 11:24	10

Client Sample Results

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

Job ID: 500-242217-1

Client Sample ID: MW-03
Date Collected: 11/07/23 10:23
Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/17/23 09:13	11/29/23 01:44	1
Arsenic	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 16:10	1
Barium	0.12		0.0025		mg/L		11/17/23 09:13	11/29/23 01:44	1
Beryllium	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 01:44	1
Boron	1.1		0.050		mg/L		11/17/23 09:13	11/29/23 16:10	1
Cadmium	<0.00050		0.00050		mg/L		11/17/23 09:13	11/29/23 01:44	1
Calcium	90		0.20		mg/L		11/17/23 09:13	11/29/23 01:44	1
Chromium	<0.0050		0.0050		mg/L		11/17/23 09:13	11/29/23 01:44	1
Cobalt	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 01:44	1
Lead	<0.00050		0.00050		mg/L		11/17/23 09:13	11/29/23 01:44	1
Lithium	<0.010	^+	0.010		mg/L		11/17/23 09:13	11/29/23 01:44	1
Molybdenum	<0.0050		0.0050		mg/L		11/17/23 09:13	11/29/23 01:44	1
Selenium	0.0055		0.0025		mg/L		11/17/23 09:13	11/29/23 01:44	1
Thallium	<0.0020		0.0020		mg/L		11/17/23 09:13	11/29/23 01:44	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/20/23 13:30	11/21/23 08:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	530		10		mg/L			11/09/23 01:46	1
Chloride (SM 4500 Cl- E)	59		4.0		mg/L			11/15/23 15:37	2
Fluoride (SM 4500 F C)	0.19		0.10		mg/L			11/16/23 14:43	1
Sulfate (SM 4500 SO4 E)	91		10		mg/L			11/28/23 11:25	2

Client Sample Results

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

Job ID: 500-242217-1

Client Sample ID: MW-04

Lab Sample ID: 500-242217-4

Date Collected: 11/07/23 12:15

Matrix: Water

Date Received: 11/08/23 09:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/17/23 09:13	11/29/23 01:56	1
Arsenic	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 16:21	1
Barium	0.065		0.0025		mg/L		11/17/23 09:13	11/29/23 01:56	1
Beryllium	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 01:56	1
Boron	0.78		0.050		mg/L		11/17/23 09:13	11/29/23 16:21	1
Cadmium	<0.00050		0.00050		mg/L		11/17/23 09:13	11/29/23 01:56	1
Calcium	100		0.20		mg/L		11/17/23 09:13	11/29/23 01:56	1
Chromium	<0.0050		0.0050		mg/L		11/17/23 09:13	11/29/23 01:56	1
Cobalt	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 01:56	1
Lead	<0.00050		0.00050		mg/L		11/17/23 09:13	11/29/23 01:56	1
Lithium	<0.010	^+	0.010		mg/L		11/17/23 09:13	11/29/23 01:56	1
Molybdenum	<0.0050		0.0050		mg/L		11/17/23 09:13	11/29/23 01:56	1
Selenium	0.0070		0.0025		mg/L		11/17/23 09:13	11/29/23 01:56	1
Thallium	<0.0020		0.0020		mg/L		11/17/23 09:13	11/29/23 01:56	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/20/23 13:30	11/21/23 09:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	620		10		mg/L			11/09/23 01:48	1
Chloride (SM 4500 Cl- E)	59		4.0		mg/L			11/15/23 15:38	2
Fluoride (SM 4500 F C)	0.21		0.10		mg/L			11/16/23 14:48	1
Sulfate (SM 4500 SO4 E)	150		50		mg/L			11/28/23 11:25	10

Client Sample Results

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

Job ID: 500-242217-1

Client Sample ID: MW-05

Lab Sample ID: 500-242217-5

Date Collected: 11/07/23 12:08

Matrix: Water

Date Received: 11/08/23 09:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/17/23 09:13	11/29/23 01:59	1
Arsenic	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 16:25	1
Barium	0.039		0.0025		mg/L		11/17/23 09:13	11/29/23 01:59	1
Beryllium	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 01:59	1
Boron	1.5		0.050		mg/L		11/17/23 09:13	11/29/23 16:25	1
Cadmium	<0.00050		0.00050		mg/L		11/17/23 09:13	11/29/23 01:59	1
Calcium	110		0.20		mg/L		11/17/23 09:13	11/29/23 01:59	1
Chromium	<0.0050		0.0050		mg/L		11/17/23 09:13	11/29/23 01:59	1
Cobalt	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 01:59	1
Lead	<0.00050		0.00050		mg/L		11/17/23 09:13	11/29/23 01:59	1
Lithium	<0.010	^+	0.010		mg/L		11/17/23 09:13	11/29/23 01:59	1
Molybdenum	<0.0050		0.0050		mg/L		11/17/23 09:13	11/29/23 01:59	1
Selenium	0.0025		0.0025		mg/L		11/17/23 09:13	11/29/23 01:59	1
Thallium	<0.0020		0.0020		mg/L		11/17/23 09:13	11/29/23 01:59	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/20/23 13:30	11/21/23 09:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	700		10		mg/L			11/09/23 01:51	1
Chloride (SM 4500 Cl- E)	98		20		mg/L			11/15/23 15:38	10
Fluoride (SM 4500 F C)	0.26		0.10		mg/L			11/16/23 14:57	1
Sulfate (SM 4500 SO4 E)	150		50		mg/L			11/28/23 11:25	10

Client Sample Results

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

Job ID: 500-242217-1

Client Sample ID: MW-10
Date Collected: 11/07/23 14:56
Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/17/23 09:13	11/29/23 02:03	1
Arsenic	0.0015		0.0010		mg/L		11/17/23 09:13	11/29/23 16:28	1
Barium	0.25		0.0025		mg/L		11/17/23 09:13	11/29/23 02:03	1
Beryllium	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 02:03	1
Boron	2.4		0.050		mg/L		11/17/23 09:13	11/29/23 16:28	1
Cadmium	<0.00050		0.00050		mg/L		11/17/23 09:13	11/29/23 02:03	1
Calcium	110		0.20		mg/L		11/17/23 09:13	11/29/23 02:03	1
Chromium	<0.0050		0.0050		mg/L		11/17/23 09:13	11/29/23 02:03	1
Cobalt	0.0081		0.0010		mg/L		11/17/23 09:13	11/29/23 02:03	1
Lead	0.0019		0.00050		mg/L		11/17/23 09:13	11/29/23 02:03	1
Lithium	<0.010	^+	0.010		mg/L		11/17/23 09:13	11/29/23 02:03	1
Molybdenum	<0.0050		0.0050		mg/L		11/17/23 09:13	11/29/23 02:03	1
Selenium	0.0043		0.0025		mg/L		11/17/23 09:13	11/29/23 02:03	1
Thallium	<0.0020		0.0020		mg/L		11/17/23 09:13	11/29/23 02:03	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/20/23 13:30	11/21/23 09:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	630		10		mg/L			11/09/23 01:53	1
Chloride (SM 4500 Cl- E)	42		2.0		mg/L			11/15/23 15:18	1
Fluoride (SM 4500 F C)	0.31		0.10		mg/L			11/16/23 15:02	1
Sulfate (SM 4500 SO4 E)	150		50		mg/L			11/28/23 11:27	10

Client Sample Results

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

Job ID: 500-242217-1

Client Sample ID: Duplicate

Lab Sample ID: 500-242217-7

Date Collected: 11/07/23 00:00

Matrix: Water

Date Received: 11/08/23 09:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		11/17/23 09:13	11/29/23 02:07	1
Arsenic	0.0011		0.0010		mg/L		11/17/23 09:13	11/29/23 16:32	1
Barium	0.22		0.0025		mg/L		11/17/23 09:13	11/29/23 02:07	1
Beryllium	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 02:07	1
Boron	2.6		0.050		mg/L		11/17/23 09:13	11/29/23 16:32	1
Cadmium	<0.00050		0.00050		mg/L		11/17/23 09:13	11/29/23 02:07	1
Calcium	110		0.20		mg/L		11/17/23 09:13	11/29/23 02:07	1
Chromium	<0.0050		0.0050		mg/L		11/17/23 09:13	11/29/23 02:07	1
Cobalt	0.0045		0.0010		mg/L		11/17/23 09:13	11/29/23 02:07	1
Lead	0.00087		0.00050		mg/L		11/17/23 09:13	11/29/23 02:07	1
Lithium	<0.010	^+	0.010		mg/L		11/17/23 09:13	11/29/23 02:07	1
Molybdenum	<0.0050		0.0050		mg/L		11/17/23 09:13	11/29/23 02:07	1
Selenium	0.0047		0.0025		mg/L		11/17/23 09:13	11/29/23 02:07	1
Thallium	<0.0020		0.0020		mg/L		11/17/23 09:13	11/29/23 02:07	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/20/23 13:30	11/21/23 09:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	620		10		mg/L			11/09/23 01:56	1
Chloride (SM 4500 Cl- E)	42		2.0		mg/L			11/15/23 15:17	1
Fluoride (SM 4500 F C)	0.30		0.10		mg/L			11/16/23 15:07	1
Sulfate (SM 4500 SO4 E)	150		50		mg/L			11/28/23 11:27	10

Definitions/Glossary

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

Job ID: 500-242217-1

Qualifiers

Metals

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

Glossary

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

QC Association Summary

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

Job ID: 500-242217-1

Metals

Prep Batch: 742775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-242217-1	MW-01	Total Recoverable	Water	3005A	
500-242217-2	MW-02	Total Recoverable	Water	3005A	
500-242217-3	MW-03	Total Recoverable	Water	3005A	
500-242217-4	MW-04	Total Recoverable	Water	3005A	
500-242217-5	MW-05	Total Recoverable	Water	3005A	
500-242217-6	MW-10	Total Recoverable	Water	3005A	
500-242217-7	Duplicate	Total Recoverable	Water	3005A	
MB 500-742775/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-742775/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 743111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-242217-1	MW-01	Total/NA	Water	7470A	
500-242217-2	MW-02	Total/NA	Water	7470A	
500-242217-3	MW-03	Total/NA	Water	7470A	
500-242217-4	MW-04	Total/NA	Water	7470A	
500-242217-5	MW-05	Total/NA	Water	7470A	
500-242217-6	MW-10	Total/NA	Water	7470A	
500-242217-7	Duplicate	Total/NA	Water	7470A	
MB 500-743111/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-743111/13-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 743325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-242217-1	MW-01	Total/NA	Water	7470A	743111
500-242217-2	MW-02	Total/NA	Water	7470A	743111
500-242217-3	MW-03	Total/NA	Water	7470A	743111
500-242217-4	MW-04	Total/NA	Water	7470A	743111
500-242217-5	MW-05	Total/NA	Water	7470A	743111
500-242217-6	MW-10	Total/NA	Water	7470A	743111
500-242217-7	Duplicate	Total/NA	Water	7470A	743111
MB 500-743111/12-A	Method Blank	Total/NA	Water	7470A	743111
LCS 500-743111/13-A	Lab Control Sample	Total/NA	Water	7470A	743111

Analysis Batch: 744190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-242217-1	MW-01	Total Recoverable	Water	6020B	742775
500-242217-2	MW-02	Total Recoverable	Water	6020B	742775
500-242217-3	MW-03	Total Recoverable	Water	6020B	742775
500-242217-4	MW-04	Total Recoverable	Water	6020B	742775
500-242217-5	MW-05	Total Recoverable	Water	6020B	742775
500-242217-6	MW-10	Total Recoverable	Water	6020B	742775
500-242217-7	Duplicate	Total Recoverable	Water	6020B	742775
MB 500-742775/1-A	Method Blank	Total Recoverable	Water	6020B	742775
LCS 500-742775/2-A	Lab Control Sample	Total Recoverable	Water	6020B	742775

Analysis Batch: 744442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-242217-1	MW-01	Total Recoverable	Water	6020B	742775
500-242217-2	MW-02	Total Recoverable	Water	6020B	742775
500-242217-3	MW-03	Total Recoverable	Water	6020B	742775

Eurofins Chicago

QC Association Summary

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

Job ID: 500-242217-1

Metals (Continued)

Analysis Batch: 744442 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-242217-4	MW-04	Total Recoverable	Water	6020B	742775
500-242217-5	MW-05	Total Recoverable	Water	6020B	742775
500-242217-6	MW-10	Total Recoverable	Water	6020B	742775
500-242217-7	Duplicate	Total Recoverable	Water	6020B	742775
MB 500-742775/1-A	Method Blank	Total Recoverable	Water	6020B	742775
LCS 500-742775/2-A	Lab Control Sample	Total Recoverable	Water	6020B	742775

General Chemistry

Analysis Batch: 741309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-242217-1	MW-01	Total/NA	Water	SM 2540C	
500-242217-2	MW-02	Total/NA	Water	SM 2540C	
500-242217-3	MW-03	Total/NA	Water	SM 2540C	
500-242217-4	MW-04	Total/NA	Water	SM 2540C	
500-242217-5	MW-05	Total/NA	Water	SM 2540C	
500-242217-6	MW-10	Total/NA	Water	SM 2540C	
500-242217-7	Duplicate	Total/NA	Water	SM 2540C	
MB 500-741309/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-741309/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 742389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-242217-1	MW-01	Total/NA	Water	SM 4500 Cl- E	
500-242217-2	MW-02	Total/NA	Water	SM 4500 Cl- E	
500-242217-3	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-242217-4	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-242217-5	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-242217-6	MW-10	Total/NA	Water	SM 4500 Cl- E	
500-242217-7	Duplicate	Total/NA	Water	SM 4500 Cl- E	
MB 500-742389/102	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-742389/103	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 742737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-242217-1	MW-01	Total/NA	Water	SM 4500 F C	
500-242217-2	MW-02	Total/NA	Water	SM 4500 F C	
500-242217-3	MW-03	Total/NA	Water	SM 4500 F C	
500-242217-4	MW-04	Total/NA	Water	SM 4500 F C	
500-242217-5	MW-05	Total/NA	Water	SM 4500 F C	
500-242217-6	MW-10	Total/NA	Water	SM 4500 F C	
500-242217-7	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-742737/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-742737/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 744036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-242217-1	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-242217-2	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-242217-3	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-242217-4	MW-04	Total/NA	Water	SM 4500 SO4 E	

Eurofins Chicago

QC Association Summary

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

Job ID: 500-242217-1

General Chemistry (Continued)

Analysis Batch: 744036 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-242217-5	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-242217-6	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-242217-7	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-744036/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-744036/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

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

QC Sample Results

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

Job ID: 500-242217-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-742775/1-A
Matrix: Water
Analysis Batch: 744190

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 742775

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0030		0.0030		mg/L		11/17/23 09:13	11/29/23 01:10	1
Barium	<0.0025		0.0025		mg/L		11/17/23 09:13	11/29/23 01:10	1
Beryllium	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 01:10	1
Cadmium	<0.00050		0.00050		mg/L		11/17/23 09:13	11/29/23 01:10	1
Calcium	<0.20		0.20		mg/L		11/17/23 09:13	11/29/23 01:10	1
Chromium	<0.0050		0.0050		mg/L		11/17/23 09:13	11/29/23 01:10	1
Cobalt	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 01:10	1
Lead	<0.00050		0.00050		mg/L		11/17/23 09:13	11/29/23 01:10	1
Lithium	<0.010	^+	0.010		mg/L		11/17/23 09:13	11/29/23 01:10	1
Molybdenum	<0.0050		0.0050		mg/L		11/17/23 09:13	11/29/23 01:10	1
Selenium	<0.0025		0.0025		mg/L		11/17/23 09:13	11/29/23 01:10	1
Thallium	<0.0020		0.0020		mg/L		11/17/23 09:13	11/29/23 01:10	1

Lab Sample ID: MB 500-742775/1-A
Matrix: Water
Analysis Batch: 744442

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 742775

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.0010		0.0010		mg/L		11/17/23 09:13	11/29/23 14:46	1
Boron	<0.050		0.050		mg/L		11/17/23 09:13	11/29/23 14:46	1

Lab Sample ID: LCS 500-742775/2-A
Matrix: Water
Analysis Batch: 744190

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 742775

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.500	0.499		mg/L		100	80 - 120
Beryllium	0.0500	0.0480		mg/L		96	80 - 120
Cadmium	0.0500	0.0479		mg/L		96	80 - 120
Calcium	10.0	8.31		mg/L		83	80 - 120
Chromium	0.200	0.195		mg/L		97	80 - 120
Cobalt	0.500	0.493		mg/L		99	80 - 120
Lead	0.100	0.0986		mg/L		99	80 - 120
Lithium	0.100	0.106	^+	mg/L		106	80 - 120
Molybdenum	1.00	0.949		mg/L		95	80 - 120
Selenium	0.100	0.0958		mg/L		96	80 - 120
Thallium	0.100	0.103		mg/L		103	80 - 120

Lab Sample ID: LCS 500-742775/2-A
Matrix: Water
Analysis Batch: 744442

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 742775

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	0.960		mg/L		96	80 - 120

QC Sample Results

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

Job ID: 500-242217-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-743111/12-A
Matrix: Water
Analysis Batch: 743325

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 743111

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		11/20/23 13:30	11/21/23 08:50	1

Lab Sample ID: LCS 500-743111/13-A
Matrix: Water
Analysis Batch: 743325

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 743111

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00201	0.00207		mg/L		103	80 - 120

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

Lab Sample ID: MB 500-741309/1
Matrix: Water
Analysis Batch: 741309

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			11/09/23 01:28	1

Lab Sample ID: LCS 500-741309/2
Matrix: Water
Analysis Batch: 741309

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	246		mg/L		98	80 - 120

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-742389/102
Matrix: Water
Analysis Batch: 742389

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			11/15/23 15:17	1

Lab Sample ID: LCS 500-742389/103
Matrix: Water
Analysis Batch: 742389

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	20.9		mg/L		105	85 - 115

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-742737/3
Matrix: Water
Analysis Batch: 742737

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			11/16/23 13:21	1

Eurofins Chicago

QC Sample Results

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

Job ID: 500-242217-1

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 500-742737/4
Matrix: Water
Analysis Batch: 742737

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	9.90		mg/L		99	90 - 119

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-744036/16
Matrix: Water
Analysis Batch: 744036

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			11/28/23 11:23	1

Lab Sample ID: LCS 500-744036/17
Matrix: Water
Analysis Batch: 744036

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	19.9		mg/L		99	88 - 123

Chain of Custody Record

541618



Environment Testing
TestAmerica

Address _____

Regulatory Program: DW NPDES RCRA Other

TAL-8210

Client Contact Company Name: <u>KPRG and Associates</u> Address: <u>14665 W. Lisbon Rd, Ste 1A</u> City/State/Zip: <u>Brockfield, WI 53005</u> Phone: <u>262-781-0475</u> Fax: _____ Project Name: <u>Midwest Generation - Powertran</u> Site: <u>CCR AB2218330</u> P O #: <u>FAB</u>		Project Manager: <u>Diana Mockler</u> Tel/Email: _____		Site Contact: _____ Lab Contact: _____		Date: _____ Carrier: _____						
Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below: <u>standard</u> <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day				500-242217 COC		COC No: _____ of _____ COCs Sampler: _____ For Lab Use Only: Walk-in Client: _____ Lab Sampling: _____ Job / SDG No: <u>500-742217</u>						
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)			Sample Specific Notes		
1 MW-01	11/7/23	1554	G	Water	5	N	N	X	X	X	X	
2 MW-02		0903				N	N	X	X	X	X	
3 MW-03		1023				N	N	X	X	X	X	
4 MW-04		1215				N	N	X	X	X	X	
5 MW-05		1708				N	N	X	X	X	X	
6 MW-10		1456				N	N	X	X	X	X	
7 Duplicate	11/7/23	-	G	Water	5	N	N	X	X	X	X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other <u>None</u>						449164						
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample <input checked="" type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months						
Special Instructions/QC Requirements & Comments: <div style="text-align: right; font-size: 18pt; font-weight: bold;">27+25, 4.2+4.0</div>												
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No _____		Cooler Temp (°C) Obs'd _____ Corr'd _____		Therm ID No _____						
Relinquished by: <u>Jack Zinner</u>		Company: <u>KPRG</u>		Date/Time: <u>11/7/23 1800</u>		Received by: _____		Company: _____		Date/Time: _____		
Relinquished by: _____		Company: _____		Date/Time: _____		Received by: _____		Company: _____		Date/Time: _____		
Relinquished by: _____		Company: _____		Date/Time: _____		Received in Laboratory by: <u>Stephanie Hernandez</u>		Company: <u>EETA</u>		Date/Time: <u>11/8/23 0955</u>		

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

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

SHIP DATE: 07NOV23
ACTWGT: 52.50 LB
CAD: 6994780/SSFE2460
DIMS: 27x14x14 IN

WESTMONT, IL 60559
UNITED STATES US

BILL THIRD PARTY

TO EUROFINS

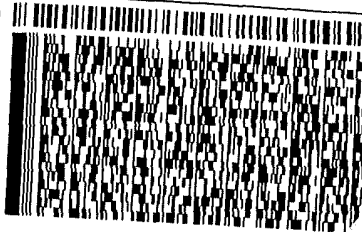
2417 BOND ST.

UNIVERSITY PARK IL 60484

(666) 666-6666
INVT
PO1

REF:

DEPT:



AdEx
17888
NOV 10:30A
0048
11.08
RT 519
ST 25

2 of 6
MPS# 7860 7723 0048
0263

Mstr# 7860 7723 0037

0201

XP JOTA

NOV 10:30A
OVERNIGHT
AHS
60484
IL-US ORD



Part # 156297-42964

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

SHIP DATE: 07NOV23
ACTWGT: 52.50 LB
CAD: 6994780/SSFE2460
DIMS: 27x14x14 IN

WESTMONT, IL 60559
UNITED STATES US

BILL THIRD PARTY

TO EUROFINS

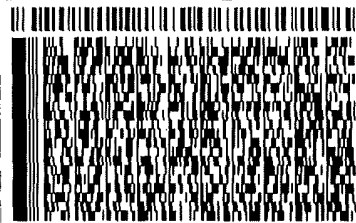
2417 BOND ST.

UNIVERSITY PARK IL 60484

(666) 666-6666
INVT
PO1

REF:

DEPT:



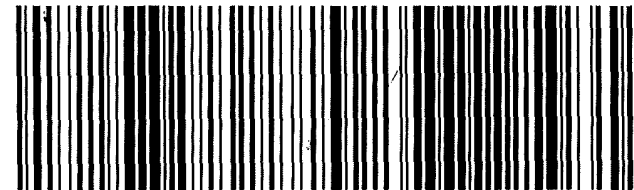
500-242217 Waybi

4 of 6
MPS# 7860 7723 0060
0263
Mstr# 7860 7723 0037

0201

XP JOTA

WED - 08 NOV 10:30A
PRIORITY OVERNIGHT
AHS
60484
IL-US ORD



Part # 156297-42964

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

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-242217-1

Login Number: 242217

List Number: 1

Creator: Hernandez, Stephanie

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5,4.0
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: 500-242217-1

Client Sample ID: MW-01
Date Collected: 11/07/23 15:54
Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			742775	BDE	EET CHI	11/17/23 09:13 - 11/17/23 09:43 ¹
Total Recoverable	Analysis	6020B		1	744190	BJH	EET CHI	11/29/23 01:37
Total Recoverable	Prep	3005A			742775	BDE	EET CHI	11/17/23 09:13 - 11/17/23 09:43 ¹
Total Recoverable	Analysis	6020B		1	744442	BJH	EET CHI	11/29/23 16:02
Total/NA	Prep	7470A			743111	MJG	EET CHI	11/20/23 13:30 - 11/20/23 15:30 ¹
Total/NA	Analysis	7470A		1	743325	MJG	EET CHI	11/21/23 08:54
Total/NA	Analysis	SM 2540C		1	741309	CLB	EET CHI	11/09/23 01:40
Total/NA	Analysis	SM 4500 CI- E		1	742389	TR	EET CHI	11/15/23 15:18
Total/NA	Analysis	SM 4500 F C		1	742737	SO	EET CHI	11/16/23 14:33
Total/NA	Analysis	SM 4500 SO4 E		2	744036	TR	EET CHI	11/28/23 11:24

Client Sample ID: MW-02
Date Collected: 11/07/23 09:03
Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			742775	BDE	EET CHI	11/17/23 09:13 - 11/17/23 09:43 ¹
Total Recoverable	Analysis	6020B		1	744190	BJH	EET CHI	11/29/23 01:40
Total Recoverable	Prep	3005A			742775	BDE	EET CHI	11/17/23 09:13 - 11/17/23 09:43 ¹
Total Recoverable	Analysis	6020B		1	744442	BJH	EET CHI	11/29/23 16:06
Total/NA	Prep	7470A			743111	MJG	EET CHI	11/20/23 13:30 - 11/20/23 15:30 ¹
Total/NA	Analysis	7470A		1	743325	MJG	EET CHI	11/21/23 08:56
Total/NA	Analysis	SM 2540C		1	741309	CLB	EET CHI	11/09/23 01:43
Total/NA	Analysis	SM 4500 CI- E		1	742389	TR	EET CHI	11/15/23 15:18
Total/NA	Analysis	SM 4500 F C		1	742737	SO	EET CHI	11/16/23 14:38
Total/NA	Analysis	SM 4500 SO4 E		10	744036	TR	EET CHI	11/28/23 11:24

Client Sample ID: MW-03
Date Collected: 11/07/23 10:23
Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			742775	BDE	EET CHI	11/17/23 09:13 - 11/17/23 09:43 ¹
Total Recoverable	Analysis	6020B		1	744190	BJH	EET CHI	11/29/23 01:44
Total Recoverable	Prep	3005A			742775	BDE	EET CHI	11/17/23 09:13 - 11/17/23 09:43 ¹
Total Recoverable	Analysis	6020B		1	744442	BJH	EET CHI	11/29/23 16:10
Total/NA	Prep	7470A			743111	MJG	EET CHI	11/20/23 13:30 - 11/20/23 15:30 ¹
Total/NA	Analysis	7470A		1	743325	MJG	EET CHI	11/21/23 08:59
Total/NA	Analysis	SM 2540C		1	741309	CLB	EET CHI	11/09/23 01:46
Total/NA	Analysis	SM 4500 CI- E		2	742389	TR	EET CHI	11/15/23 15:37
Total/NA	Analysis	SM 4500 F C		1	742737	SO	EET CHI	11/16/23 14:43
Total/NA	Analysis	SM 4500 SO4 E		2	744036	TR	EET CHI	11/28/23 11:25

Lab Chronicle

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

Job ID: 500-242217-1

Client Sample ID: MW-04

Date Collected: 11/07/23 12:15

Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			742775	BDE	EET CHI	11/17/23 09:13 - 11/17/23 09:43 ¹
Total Recoverable	Analysis	6020B		1	744190	BJH	EET CHI	11/29/23 01:56
Total Recoverable	Prep	3005A			742775	BDE	EET CHI	11/17/23 09:13 - 11/17/23 09:43 ¹
Total Recoverable	Analysis	6020B		1	744442	BJH	EET CHI	11/29/23 16:21
Total/NA	Prep	7470A			743111	MJG	EET CHI	11/20/23 13:30 - 11/20/23 15:30 ¹
Total/NA	Analysis	7470A		1	743325	MJG	EET CHI	11/21/23 09:17
Total/NA	Analysis	SM 2540C		1	741309	CLB	EET CHI	11/09/23 01:48
Total/NA	Analysis	SM 4500 CI- E		2	742389	TR	EET CHI	11/15/23 15:38
Total/NA	Analysis	SM 4500 F C		1	742737	SO	EET CHI	11/16/23 14:48
Total/NA	Analysis	SM 4500 SO4 E		10	744036	TR	EET CHI	11/28/23 11:25

Client Sample ID: MW-05

Date Collected: 11/07/23 12:08

Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			742775	BDE	EET CHI	11/17/23 09:13 - 11/17/23 09:43 ¹
Total Recoverable	Analysis	6020B		1	744190	BJH	EET CHI	11/29/23 01:59
Total Recoverable	Prep	3005A			742775	BDE	EET CHI	11/17/23 09:13 - 11/17/23 09:43 ¹
Total Recoverable	Analysis	6020B		1	744442	BJH	EET CHI	11/29/23 16:25
Total/NA	Prep	7470A			743111	MJG	EET CHI	11/20/23 13:30 - 11/20/23 15:30 ¹
Total/NA	Analysis	7470A		1	743325	MJG	EET CHI	11/21/23 09:20
Total/NA	Analysis	SM 2540C		1	741309	CLB	EET CHI	11/09/23 01:51
Total/NA	Analysis	SM 4500 CI- E		10	742389	TR	EET CHI	11/15/23 15:38
Total/NA	Analysis	SM 4500 F C		1	742737	SO	EET CHI	11/16/23 14:57
Total/NA	Analysis	SM 4500 SO4 E		10	744036	TR	EET CHI	11/28/23 11:25

Client Sample ID: MW-10

Date Collected: 11/07/23 14:56

Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			742775	BDE	EET CHI	11/17/23 09:13 - 11/17/23 09:43 ¹
Total Recoverable	Analysis	6020B		1	744190	BJH	EET CHI	11/29/23 02:03
Total Recoverable	Prep	3005A			742775	BDE	EET CHI	11/17/23 09:13 - 11/17/23 09:43 ¹
Total Recoverable	Analysis	6020B		1	744442	BJH	EET CHI	11/29/23 16:28
Total/NA	Prep	7470A			743111	MJG	EET CHI	11/20/23 13:30 - 11/20/23 15:30 ¹
Total/NA	Analysis	7470A		1	743325	MJG	EET CHI	11/21/23 09:22
Total/NA	Analysis	SM 2540C		1	741309	CLB	EET CHI	11/09/23 01:53
Total/NA	Analysis	SM 4500 CI- E		1	742389	TR	EET CHI	11/15/23 15:18
Total/NA	Analysis	SM 4500 F C		1	742737	SO	EET CHI	11/16/23 15:02
Total/NA	Analysis	SM 4500 SO4 E		10	744036	TR	EET CHI	11/28/23 11:27

Lab Chronicle

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

Job ID: 500-242217-1

Client Sample ID: Duplicate
Date Collected: 11/07/23 00:00
Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			742775	BDE	EET CHI	11/17/23 09:13 - 11/17/23 09:43 ¹
Total Recoverable	Analysis	6020B		1	744190	BJH	EET CHI	11/29/23 02:07
Total Recoverable	Prep	3005A			742775	BDE	EET CHI	11/17/23 09:13 - 11/17/23 09:43 ¹
Total Recoverable	Analysis	6020B		1	744442	BJH	EET CHI	11/29/23 16:32
Total/NA	Prep	7470A			743111	MJG	EET CHI	11/20/23 13:30 - 11/20/23 15:30 ¹
Total/NA	Analysis	7470A		1	743325	MJG	EET CHI	11/21/23 09:24
Total/NA	Analysis	SM 2540C		1	741309	CLB	EET CHI	11/09/23 01:56
Total/NA	Analysis	SM 4500 Cl- E		1	742389	TR	EET CHI	11/15/23 15:17
Total/NA	Analysis	SM 4500 F C		1	742737	SO	EET CHI	11/16/23 15:07
Total/NA	Analysis	SM 4500 SO4 E		10	744036	TR	EET CHI	11/28/23 11:27

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

Laboratory References:

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



Accreditation/Certification Summary

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

Job ID: 500-242217-1

Laboratory: Eurofins Chicago

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

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

1

2

3

4

5

6

7

8

9

10

11

12

13

ANALYTICAL REPORT

PREPARED FOR

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

Generated 12/13/2023 5:12:23 PM

JOB DESCRIPTION

Powerton CCR FAB (RAD)

JOB NUMBER

500-242217-2

Eurofins Chicago

Job Notes

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

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

Authorization



Generated
12/13/2023 5:12:23 PM

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



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	14
QC Association	15
QC Sample Results	16
Chain of Custody	17
Receipt Checklists	20
Chronicle	22
Certification Summary	24
Tracer Carrier Summary	25

Case Narrative

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

Job ID: 500-242217-2

Job ID: 500-242217-2

Laboratory: Eurofins Chicago

Narrative

**Job Narrative
500-242217-2**

Receipt

The samples were received on 11/8/2023 9:55 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 2.5°C and 4.0°C

Gas Flow Proportional Counter

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

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

Method Summary

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

Job ID: 500-242217-2

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: 500-242217-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-242217-1	MW-01	Water	11/07/23 15:54	11/08/23 09:55
500-242217-2	MW-02	Water	11/07/23 09:03	11/08/23 09:55
500-242217-3	MW-03	Water	11/07/23 10:23	11/08/23 09:55
500-242217-4	MW-04	Water	11/07/23 12:15	11/08/23 09:55
500-242217-5	MW-05	Water	11/07/23 12:08	11/08/23 09:55
500-242217-6	MW-10	Water	11/07/23 14:56	11/08/23 09:55
500-242217-7	Duplicate	Water	11/07/23 00:00	11/08/23 09:55

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

Client Sample Results

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

Job ID: 500-242217-2

Client Sample ID: MW-01

Lab Sample ID: 500-242217-1

Date Collected: 11/07/23 15:54

Matrix: Water

Date Received: 11/08/23 09:55

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	0.130	U	0.178	0.179	1.00	0.301	pCi/L	11/10/23 11:12	12/13/23 07:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.5		30 - 110					11/10/23 11:12	12/13/23 07:20	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	0.226	U	0.307	0.308	1.00	0.515	pCi/L	11/10/23 11:17	12/12/23 15:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.5		30 - 110					11/10/23 11:17	12/12/23 15:56	1
Y Carrier	81.9		30 - 110					11/10/23 11:17	12/12/23 15:56	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	0.356	U	0.355	0.356	5.00	0.515	pCi/L		12/12/23 17:36	1

Client Sample Results

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

Job ID: 500-242217-2

Client Sample ID: MW-02
Date Collected: 11/07/23 09:03
Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-2
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	0.0235	U	0.146	0.146	1.00	0.285	pCi/L	11/10/23 11:12	12/13/23 07:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.4		30 - 110					11/10/23 11:12	12/13/23 07:20	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	0.296	U	0.391	0.392	1.00	0.652	pCi/L	11/10/23 11:17	12/12/23 15:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.4		30 - 110					11/10/23 11:17	12/12/23 15:56	1
Y Carrier	64.3		30 - 110					11/10/23 11:17	12/12/23 15:56	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	0.320	U	0.417	0.418	5.00	0.652	pCi/L		12/12/23 17:36	1

Client Sample Results

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

Job ID: 500-242217-2

Client Sample ID: MW-03
Date Collected: 11/07/23 10:23
Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-3
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	0.0521	U	0.169	0.169	1.00	0.314	pCi/L	11/10/23 11:12	12/13/23 07:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.4		30 - 110					11/10/23 11:12	12/13/23 07:20	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.128	U	0.316	0.316	1.00	0.625	pCi/L	11/10/23 11:17	12/12/23 15:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.4		30 - 110					11/10/23 11:17	12/12/23 15:56	1
Y Carrier	71.4		30 - 110					11/10/23 11:17	12/12/23 15:56	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	-0.0758	U	0.358	0.358	5.00	0.625	pCi/L		12/12/23 17:36	1

Client Sample Results

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

Job ID: 500-242217-2

Client Sample ID: MW-04
Date Collected: 11/07/23 12:15
Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-4
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.119	U	0.182	0.182	1.00	0.312	pCi/L	11/10/23 11:12	12/13/23 07:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.7		30 - 110					11/10/23 11:12	12/13/23 07:20	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	0.560		0.325	0.329	1.00	0.464	pCi/L	11/10/23 11:17	12/12/23 15:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.7		30 - 110					11/10/23 11:17	12/12/23 15:58	1
Y Carrier	85.2		30 - 110					11/10/23 11:17	12/12/23 15:58	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	0.679		0.372	0.376	5.00	0.464	pCi/L		12/12/23 17:36	1

Client Sample Results

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

Job ID: 500-242217-2

Client Sample ID: MW-05

Lab Sample ID: 500-242217-5

Date Collected: 11/07/23 12:08

Matrix: Water

Date Received: 11/08/23 09:55

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	-0.0162	U	0.141	0.141	1.00	0.293	pCi/L	11/10/23 11:12	12/13/23 07:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.7		30 - 110					11/10/23 11:12	12/13/23 07:20	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	0.444		0.292	0.295	1.00	0.428	pCi/L	11/10/23 11:17	12/12/23 15:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.7		30 - 110					11/10/23 11:17	12/12/23 15:57	1
Y Carrier	89.7		30 - 110					11/10/23 11:17	12/12/23 15:57	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	0.428		0.324	0.327	5.00	0.428	pCi/L		12/12/23 17:36	1

Client Sample Results

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

Job ID: 500-242217-2

Client Sample ID: MW-10

Lab Sample ID: 500-242217-6

Date Collected: 11/07/23 14:56

Matrix: Water

Date Received: 11/08/23 09:55

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	0.465		0.300	0.303	1.00	0.421	pCi/L	11/10/23 11:12	12/13/23 07:20	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	96.4		30 - 110					11/10/23 11:12	12/13/23 07:20	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.44		0.535	0.551	1.00	0.667	pCi/L	11/10/23 11:17	12/12/23 15:57	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	96.4		30 - 110					11/10/23 11:17	12/12/23 15:57	1
Y Carrier	83.0		30 - 110					11/10/23 11:17	12/12/23 15:57	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.91		0.613	0.629	5.00	0.667	pCi/L		12/12/23 17:36	1

Client Sample Results

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

Job ID: 500-242217-2

Client Sample ID: Duplicate

Lab Sample ID: 500-242217-7

Date Collected: 11/07/23 00:00

Matrix: Water

Date Received: 11/08/23 09:55

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	0.596		0.309	0.314	1.00	0.382	pCi/L	11/10/23 11:12	12/13/23 07:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.5		30 - 110					11/10/23 11:12	12/13/23 07:20	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.05		0.514	0.523	1.00	0.704	pCi/L	11/10/23 11:17	12/12/23 15:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.5		30 - 110					11/10/23 11:17	12/12/23 15:57	1
Y Carrier	86.0		30 - 110					11/10/23 11:17	12/12/23 15:57	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	1.64		0.600	0.610	5.00	0.704	pCi/L		12/12/23 17:36	1

Definitions/Glossary

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

Job ID: 500-242217-2

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: 500-242217-2

Rad

Prep Batch: 636342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-242217-1	MW-01	Total/NA	Water	PrecSep-21	
500-242217-2	MW-02	Total/NA	Water	PrecSep-21	
500-242217-3	MW-03	Total/NA	Water	PrecSep-21	
500-242217-4	MW-04	Total/NA	Water	PrecSep-21	
500-242217-5	MW-05	Total/NA	Water	PrecSep-21	
500-242217-6	MW-10	Total/NA	Water	PrecSep-21	
500-242217-7	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-636342/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-636342/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 636343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-242217-1	MW-01	Total/NA	Water	PrecSep_0	
500-242217-2	MW-02	Total/NA	Water	PrecSep_0	
500-242217-3	MW-03	Total/NA	Water	PrecSep_0	
500-242217-4	MW-04	Total/NA	Water	PrecSep_0	
500-242217-5	MW-05	Total/NA	Water	PrecSep_0	
500-242217-6	MW-10	Total/NA	Water	PrecSep_0	
500-242217-7	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-636343/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-636343/2-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: 500-242217-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-636342/1-A
Matrix: Water
Analysis Batch: 640457

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636342

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.03171	U	0.125	0.125	1.00	0.242	pCi/L	11/10/23 11:12	12/13/23 07:10	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	105		30 - 110		11/10/23 11:12	12/13/23 07:10	1			

Lab Sample ID: LCS 160-636342/2-A
Matrix: Water
Analysis Batch: 640457

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636342

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	9.362		1.18	1.00	0.253	pCi/L	83	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	95.9		30 - 110						

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-636343/1-A
Matrix: Water
Analysis Batch: 640274

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636343

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.2391	U	0.287	0.288	1.00	0.475	pCi/L	11/10/23 11:17	12/12/23 15:54	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	105		30 - 110		11/10/23 11:17	12/12/23 15:54	1			
Y Carrier	82.2		30 - 110		11/10/23 11:17	12/12/23 15:54	1			

Lab Sample ID: LCS 160-636343/2-A
Matrix: Water
Analysis Batch: 640274

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636343

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	7.65	7.151		1.05	1.00	0.474	pCi/L	93	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	95.9		30 - 110						
Y Carrier	83.0		30 - 110						

Chain of Custody Record

541618



Environment Testing
TestAmerica

Address _____

Regulatory Program: DW NPDES RCRA Other

TAL-8210

Client Contact Company Name: <u>KPRG and Associates</u> Address: <u>14665 W. Lisbon Rd, Ste 1A</u> City/State/Zip: <u>Brockfield, WI 53005</u> Phone: <u>262-781-0475</u> Fax: _____ Project Name: <u>Midwest Generation - Powertran</u> Site: <u>CCR AB2218320</u> P O #: <u>FAB</u>		Project Manager: <u>Diana Mockler</u> Tel/Email: _____		Site Contact: _____ Lab Contact: _____		Date: _____ Carrier: _____						
Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below: <u>standard</u> <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day				500-242217 COC		COC No: _____ of _____ COCs Sampler: _____ For Lab Use Only: Walk-in Client: _____ Lab Sampling: _____ Job / SDG No: <u>500-742217</u>						
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)			Sample Specific Notes		
1 MW-01	11/7/23	1554	G	Water	5	N	N	X	X	X	X	
2 MW-02		1903				N	N	X	X	X	X	
3 MW-03		1023				N	N	X	X	X	X	
4 MW-04		1215				N	N	X	X	X	X	
5 MW-05		1708				N	N	X	X	X	X	
6 MW-10		1456				N	N	X	X	X	X	
7 Duplicate	11/7/23	-	G	Water	5	N	N	X	X	X	X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other <u>None</u>						449164						
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample <input checked="" type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months						
Special Instructions/QC Requirements & Comments:												
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No _____		Cooler Temp (°C) Obs'd _____ Corr'd _____		Therm ID No _____		27+25, 4.2+4.0				
Relinquished by: <u>[Signature]</u>		Company: <u>KPRG</u>		Date/Time: <u>11/7/23 1800</u>		Received by: _____		Company: _____		Date/Time: _____		
Relinquished by: _____		Company: _____		Date/Time: _____		Received by: _____		Company: _____		Date/Time: _____		
Relinquished by: _____		Company: _____		Date/Time: _____		Received in Laboratory by: <u>Stephanie Hernandez</u>		Company: <u>EETA</u>		Date/Time: <u>11/8/23 0955</u>		



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

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 07NOV23
ACTWGT: 52.50 LB
CAD: 6994780/SSFE2460
DIMS: 27x14x14 IN

BILL THIRD PARTY

TO EUROFINS

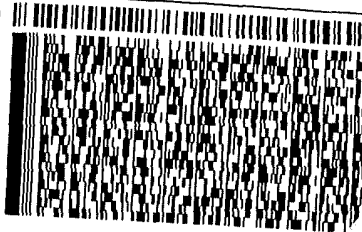
2417 BOND ST.

UNIVERSITY PARK IL 60484

(666) 666-6666
INVT
PO1

REF:

DEPT:



AdEx
17888
5 10:30
0048
11.08
RT 519
ST 25

2 of 6

MPS# 7860 7723 0048
0263

Mstr# 7860 7723 0037

0201

XP JOTA

NOV 10:30A
OVERNIGHT
AHS
60484
IL-US ORD



Part # 156297-42964

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

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 07NOV23
ACTWGT: 52.50 LB
CAD: 6994780/SSFE2460
DIMS: 27x14x14 IN

BILL THIRD PARTY

TO EUROFINS

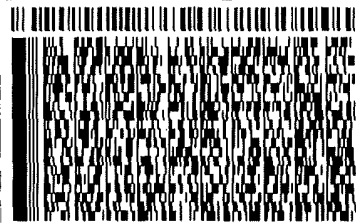
2417 BOND ST.

UNIVERSITY PARK IL 60484

(666) 666-6666
INVT
PO1

REF:

DEPT:



500-242217 Waybi

4 of 6

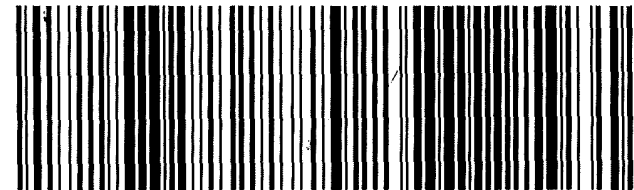
MPS# 7860 7723 0060
0263

Mstr# 7860 7723 0037

0201

XP JOTA

WED - 08 NOV 10:30A
PRIORITY OVERNIGHT
AHS
60484
IL-US ORD



Part # 156297-42964

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

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

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab) Client Contact: Diana Mockler, Diana J Shipping/Receiving: Diana.Mockler@eurofins.com Company: TestAmerica Laboratories, Inc. Address: 13715 Ridler Trail North, City: Earth City State, Zip: MO, 63045 Phone: 314-298-8566(Tel) 314-298-8757(Fax) Email:			Lab PM: Mocker, Diana J State of Origin: Illinois E-Mail: Diana.Mockler@eurofins.com Accreditations Required (See note): NELAP - Illinois	Carrier Tracking No(s): 500-181265.1 Page: Page 1 of 1 Job #: 500-242217-2						
Due Date Requested: 12/13/2023 TAT Requested (days): PO #: W/O #: Project #: 50011612 SSON#:			Analysis Requested Preservation Codes: M - Hexane N - None O - AsHClO2 P - Na2O4S Q - Na2SO3 R - NaHSO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 X - Trizma Y - EDTA Z - other (specify) Other:	Preservation Codes: A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:						
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Weaver, Solid, Onweaver, Br-Tissue, A-elt)	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	904.0/PreSep_0 Standard Target List	Special Instructions/Note:
MW-01 (500-242217-1)	11/7/23	15:54 Central	Water	Water	X	X	X	X	X	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-02 (500-242217-2)	11/7/23	09:03 Central	Water	Water	X	X	X	X	X	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-03 (500-242217-3)	11/7/23	10:23 Central	Water	Water	X	X	X	X	X	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-04 (500-242217-4)	11/7/23	12:15 Central	Water	Water	X	X	X	X	X	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-05 (500-242217-5)	11/7/23	12:08 Central	Water	Water	X	X	X	X	X	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-10 (500-242217-6)	11/7/23	14:56 Central	Water	Water	X	X	X	X	X	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
Duplicate (500-242217-7)	11/7/23	Central	Water	Water	X	X	X	X	X	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
<p>Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Chicago attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago.</p>										
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2										
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months										
Special Instructions/QC Requirements:										
Empty Kit Relinquished by: <i>Admin Fed Ex</i> Date: 11/18/23 \$51480 Relinquished by: <i>Admin Fed Ex</i> Date/Time: 11/18/23 \$51480 Relinquished by: <i>Admin Fed Ex</i> Date/Time: 11/18/23 \$51480 Relinquished by: <i>Admin Fed Ex</i> Date/Time: 11/18/23 \$51480 Custody Seals intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Cooler Temperature(s) °C and Other Remarks:										

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-242217-2

Login Number: 242217

List Number: 1

Creator: Hernandez, Stephanie

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5,4.0
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	



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-242217-2

Login Number: 242217

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 11/09/23 03:38 PM

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



Lab Chronicle

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

Job ID: 500-242217-2

Client Sample ID: MW-01

Date Collected: 11/07/23 15:54

Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			636342	KAC	EET SL	11/10/23 11:12
Total/NA	Analysis	903.0		1	640618	FLC	EET SL	12/13/23 07:20
Total/NA	Prep	PrecSep_0			636343	KAC	EET SL	11/10/23 11:17
Total/NA	Analysis	904.0		1	640274	FLC	EET SL	12/12/23 15:56
Total/NA	Analysis	Ra226_Ra228		1	640269	SCB	EET SL	12/12/23 17:36

Client Sample ID: MW-02

Date Collected: 11/07/23 09:03

Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			636342	KAC	EET SL	11/10/23 11:12
Total/NA	Analysis	903.0		1	640618	FLC	EET SL	12/13/23 07:20
Total/NA	Prep	PrecSep_0			636343	KAC	EET SL	11/10/23 11:17
Total/NA	Analysis	904.0		1	640274	FLC	EET SL	12/12/23 15:56
Total/NA	Analysis	Ra226_Ra228		1	640269	SCB	EET SL	12/12/23 17:36

Client Sample ID: MW-03

Date Collected: 11/07/23 10:23

Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			636342	KAC	EET SL	11/10/23 11:12
Total/NA	Analysis	903.0		1	640618	FLC	EET SL	12/13/23 07:20
Total/NA	Prep	PrecSep_0			636343	KAC	EET SL	11/10/23 11:17
Total/NA	Analysis	904.0		1	640274	FLC	EET SL	12/12/23 15:56
Total/NA	Analysis	Ra226_Ra228		1	640269	SCB	EET SL	12/12/23 17:36

Client Sample ID: MW-04

Date Collected: 11/07/23 12:15

Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			636342	KAC	EET SL	11/10/23 11:12
Total/NA	Analysis	903.0		1	640618	FLC	EET SL	12/13/23 07:20
Total/NA	Prep	PrecSep_0			636343	KAC	EET SL	11/10/23 11:17
Total/NA	Analysis	904.0		1	640274	FLC	EET SL	12/12/23 15:58
Total/NA	Analysis	Ra226_Ra228		1	640269	SCB	EET SL	12/12/23 17:36

Lab Chronicle

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

Job ID: 500-242217-2

Client Sample ID: MW-05

Date Collected: 11/07/23 12:08

Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			636342	KAC	EET SL	11/10/23 11:12
Total/NA	Analysis	903.0		1	640618	FLC	EET SL	12/13/23 07:20
Total/NA	Prep	PrecSep_0			636343	KAC	EET SL	11/10/23 11:17
Total/NA	Analysis	904.0		1	640274	FLC	EET SL	12/12/23 15:57
Total/NA	Analysis	Ra226_Ra228		1	640269	SCB	EET SL	12/12/23 17:36

Client Sample ID: MW-10

Date Collected: 11/07/23 14:56

Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			636342	KAC	EET SL	11/10/23 11:12
Total/NA	Analysis	903.0		1	640618	FLC	EET SL	12/13/23 07:20
Total/NA	Prep	PrecSep_0			636343	KAC	EET SL	11/10/23 11:17
Total/NA	Analysis	904.0		1	640274	FLC	EET SL	12/12/23 15:57
Total/NA	Analysis	Ra226_Ra228		1	640269	SCB	EET SL	12/12/23 17:36

Client Sample ID: Duplicate

Date Collected: 11/07/23 00:00

Date Received: 11/08/23 09:55

Lab Sample ID: 500-242217-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			636342	KAC	EET SL	11/10/23 11:12
Total/NA	Analysis	903.0		1	640618	FLC	EET SL	12/13/23 07:20
Total/NA	Prep	PrecSep_0			636343	KAC	EET SL	11/10/23 11:17
Total/NA	Analysis	904.0		1	640274	FLC	EET SL	12/12/23 15:57
Total/NA	Analysis	Ra226_Ra228		1	640269	SCB	EET SL	12/12/23 17:36

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: 500-242217-2

Laboratory: Eurofins St. Louis

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	200023	11-30-24

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

Tracer/Carrier Summary

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

Job ID: 500-242217-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)
500-242217-1	MW-01	92.5
500-242217-2	MW-02	97.4
500-242217-3	MW-03	97.4
500-242217-4	MW-04	97.7
500-242217-5	MW-05	98.7
500-242217-6	MW-10	96.4
500-242217-7	Duplicate	90.5
LCS 160-636342/2-A	Lab Control Sample	95.9
MB 160-636342/1-A	Method Blank	105

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
500-242217-1	MW-01	92.5	81.9
500-242217-2	MW-02	97.4	64.3
500-242217-3	MW-03	97.4	71.4
500-242217-4	MW-04	97.7	85.2
500-242217-5	MW-05	98.7	89.7
500-242217-6	MW-10	96.4	83.0
500-242217-7	Duplicate	90.5	86.0
LCS 160-636343/2-A	Lab Control Sample	95.9	83.0
MB 160-636343/1-A	Method Blank	105	82.2

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 1/8/2024 2:11:52 PM

JOB DESCRIPTION

Powerton CCR ABB/ASB Re-samples

JOB NUMBER

500-244356-1

Eurofins Chicago

Job Notes

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

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

Authorization



Generated
1/8/2024 2:11:52 PM

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



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	10
QC Association	11
QC Sample Results	12
Chain of Custody	14
Receipt Checklists	15
Chronicle	16
Certification Summary	17

Case Narrative

Client: KPRG and Associates, Inc.
Project: Powerton CCR ABB/ASB Re-samples

Job ID: 500-244356-1

Job ID: 500-244356-1

Eurofins Chicago

Job Narrative 500-244356-1

Receipt

The samples were received on 12/22/2023 3:08 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.2° C.

Metals

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

General Chemistry

Method SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 500-749144 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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 ABB/ASB Re-samples

Job ID: 500-244356-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CHI
SM 2540C	Solids, Total Dissolved (TDS)	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

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 ABB/ASB Re-samples

Job ID: 500-244356-1

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
500-244356-1	MW-08	Water	12/22/23 11:25	12/22/23 15:08
500-244356-2	MW-12	Water	12/22/23 11:00	12/22/23 15:08
500-244356-3	MW-10	Water	12/22/23 10:19	12/22/23 15:08

1

2

3

4

5

6

7

8

9

10

11

12

13

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Powerton CCR ABB/ASB Re-samples

Job ID: 500-244356-1

Client Sample ID: MW-08
Date Collected: 12/22/23 11:25
Date Received: 12/22/23 15:08

Lab Sample ID: 500-244356-1
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	710		10		mg/L			12/27/23 01:28	1

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

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Powerton CCR ABB/ASB Re-samples

Job ID: 500-244356-1

Client Sample ID: MW-12
Date Collected: 12/22/23 11:00
Date Received: 12/22/23 15:08

Lab Sample ID: 500-244356-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.023		0.0010		mg/L		01/05/24 09:05	01/05/24 19:44	1

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

Client Sample Results

Client: KPRG and Associates, Inc.
Project/Site: Powerton CCR ABB/ASB Re-samples

Job ID: 500-244356-1

Client Sample ID: MW-10
Date Collected: 12/22/23 10:19
Date Received: 12/22/23 15:08

Lab Sample ID: 500-244356-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	610		10		mg/L			12/27/23 01:31	1
Fluoride (SM 4500 F C)	0.30		0.10		mg/L			01/03/24 12:20	1
Sulfate (SM 4500 SO4 E)	120		50		mg/L			01/04/24 13:01	10

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

Definitions/Glossary

Client: KPRG and Associates, Inc.
Project/Site: Powerton CCR ABB/ASB Re-samples

Job ID: 500-244356-1

Qualifiers

General Chemistry

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

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 ABB/ASB Re-samples

Job ID: 500-244356-1

Metals

Prep Batch: 749242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-244356-2	MW-12	Total Recoverable	Water	3005A	
MB 500-749242/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-749242/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-244356-2 MS	MW-12	Total Recoverable	Water	3005A	
500-244356-2 MSD	MW-12	Total Recoverable	Water	3005A	
500-244356-2 DU	MW-12	Total Recoverable	Water	3005A	

Analysis Batch: 749452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-244356-2	MW-12	Total Recoverable	Water	6020B	749242
MB 500-749242/1-A	Method Blank	Total Recoverable	Water	6020B	749242
LCS 500-749242/2-A	Lab Control Sample	Total Recoverable	Water	6020B	749242
500-244356-2 MS	MW-12	Total Recoverable	Water	6020B	749242
500-244356-2 MSD	MW-12	Total Recoverable	Water	6020B	749242
500-244356-2 DU	MW-12	Total Recoverable	Water	6020B	749242

General Chemistry

Analysis Batch: 748124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-244356-1	MW-08	Total/NA	Water	SM 2540C	
500-244356-3	MW-10	Total/NA	Water	SM 2540C	
MB 500-748124/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-748124/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 749028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-244356-3	MW-10	Total/NA	Water	SM 4500 F C	
MB 500-749028/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-749028/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 749144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-244356-3	MW-10	Total/NA	Water	SM 4500 SO4 E	
MB 500-749144/55	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-749144/56	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-244356-3 MS	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-244356-3 MSD	MW-10	Total/NA	Water	SM 4500 SO4 E	

QC Sample Results

Client: KPRG and Associates, Inc.
 Project/Site: Powerton CCR ABB/ASB Re-samples

Job ID: 500-244356-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-749242/1-A
Matrix: Water
Analysis Batch: 749452

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 749242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		01/05/24 09:05	01/05/24 19:37	1

Lab Sample ID: LCS 500-749242/2-A
Matrix: Water
Analysis Batch: 749452

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 749242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.100	0.0980		mg/L		98	80 - 120

Lab Sample ID: 500-244356-2 MS
Matrix: Water
Analysis Batch: 749452

Client Sample ID: MW-12
Prep Type: Total Recoverable
Prep Batch: 749242

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.023		0.100	0.124		mg/L		101	75 - 125

Lab Sample ID: 500-244356-2 MSD
Matrix: Water
Analysis Batch: 749452

Client Sample ID: MW-12
Prep Type: Total Recoverable
Prep Batch: 749242

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	0.023		0.100	0.126		mg/L		103	75 - 125	1	20

Lab Sample ID: 500-244356-2 DU
Matrix: Water
Analysis Batch: 749452

Client Sample ID: MW-12
Prep Type: Total Recoverable
Prep Batch: 749242

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	0.023		0.100	0.0230		mg/L				1	20

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

Lab Sample ID: MB 500-748124/1
Matrix: Water
Analysis Batch: 748124

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			12/27/23 01:03	1

Lab Sample ID: LCS 500-748124/2
Matrix: Water
Analysis Batch: 748124

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	242		mg/L		97	80 - 120

QC Sample Results

Client: KPRG and Associates, Inc.
 Project/Site: Powerton CCR ABB/ASB Re-samples

Job ID: 500-244356-1

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-749028/3
 Matrix: Water
 Analysis Batch: 749028

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			01/03/24 10:24	1

Lab Sample ID: LCS 500-749028/4
 Matrix: Water
 Analysis Batch: 749028

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

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

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-749144/55
 Matrix: Water
 Analysis Batch: 749144

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			01/04/24 12:29	1

Lab Sample ID: LCS 500-749144/56
 Matrix: Water
 Analysis Batch: 749144

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	10.0	10.4		mg/L		104	88 - 123

Lab Sample ID: 500-244356-3 MS
 Matrix: Water
 Analysis Batch: 749144

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	120		10.0	137	4	mg/L		155	75 - 125

Lab Sample ID: 500-244356-3 MSD
 Matrix: Water
 Analysis Batch: 749144

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	120		10.0	138	4	mg/L		162	75 - 125	0	20

Chain of Custody Record 641655




Environment Testing America

TAL-8210

Address _____

Regulatory Program: DW NPDES RCRA Other

Client Contact Company Name <u>KPRG & Associates</u> Address <u>14665 W Lisbon Rd, Ste 1A</u> City/State/Zip <u>Brookfield WI 53005</u> Phone <u>262-781-0475</u> Fax _____ Project Name: <u>Midwest Generation</u> Site <u>Powerton CCR</u> P O # <u>AB5/ASB</u>		Project Manager: <u>Diana Mockler</u> Tel/Email: _____		Site Contact: Lab Contact _____		Date: _____ Carrier: _____		COC No _____ of _____ COCs					
Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below: <u>Standard</u> <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Filtered Sample (Y/N) _____ Perform MS / MSD (Y/N) _____ <u>Fluoride</u> <u>sulfate</u> <u>TDS</u> <u>Arsenic</u>		 500-244356 COC		Sampler _____ For Lab Use Only: Walk-in Client <input type="checkbox"/> Lab Sampling <input type="checkbox"/>		Job / SDG No <u>500-244356</u> Extra Bottles in Cooler Sample Specific Notes					
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont	Filtered	Perform MS	MSD	Fluoride	Sulfate	TDS	Arsenic	Notes
MW-08	12/22/23	1125	G	Water	1	N	N				X		
MW-12	12/22/23	1100	G	Water	1	N	N					X	
MW-10	12/22/23	1019	G	Water	1	N	N	X	X	X			
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other <u>NONE</u>						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months							
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown												Special Instructions/QC Requirements & Comments:	
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No _____		Cooler Temp (°C) Obs'd <u>3.4</u> Corr'd <u>3.2</u> Therm ID No _____									
Relinquished by <u>John M...</u>	Company <u>KPRG</u>	Date/Time <u>12/22/23 1508</u>	Received by _____	Company _____	Date/Time _____								
Relinquished by _____	Company _____	Date/Time _____	Received by _____	Company _____	Date/Time _____								
Relinquished by _____	Company _____	Date/Time _____	Received in Laboratory by <u>Heather</u>	Company <u>EETA</u>	Date/Time <u>12/22/23 1508</u>								

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-244356-1

Login Number: 244356

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	
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	

Lab Chronicle

Client: KPRG and Associates, Inc.
 Project/Site: Powerton CCR ABB/ASB Re-samples

Job ID: 500-244356-1

Client Sample ID: MW-08
Date Collected: 12/22/23 11:25
Date Received: 12/22/23 15:08

Lab Sample ID: 500-244356-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	748124	CLB	EET CHI	12/27/23 01:28

Client Sample ID: MW-12
Date Collected: 12/22/23 11:00
Date Received: 12/22/23 15:08

Lab Sample ID: 500-244356-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			749242	BDE	EET CHI	01/05/24 09:05 - 01/05/24 15:05 ¹
Total Recoverable	Analysis	6020B		1	749452	RN	EET CHI	01/05/24 19:44

Client Sample ID: MW-10
Date Collected: 12/22/23 10:19
Date Received: 12/22/23 15:08

Lab Sample ID: 500-244356-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	748124	CLB	EET CHI	12/27/23 01:31
Total/NA	Analysis	SM 4500 F C		1	749028	SO	EET CHI	01/03/24 12:20
Total/NA	Analysis	SM 4500 SO4 E		10	749144	TR	EET CHI	01/04/24 13:01

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

Laboratory References:

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



Accreditation/Certification Summary

Client: KPRG and Associates, Inc.
Project/Site: Powerton CCR ABB/ASB Re-samples

Job ID: 500-244356-1

Laboratory: Eurofins Chicago

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

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

1

2

3

4

5

6

7

8

9

10

11

12

13

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

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

Generated 1/17/2024 1:52:47 PM

JOB DESCRIPTION

Powerton CCR FAB Re-sample

JOB NUMBER

500-244357-1

Eurofins Chicago

Job Notes

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

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

Authorization



Generated
1/17/2024 1:52:47 PM

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



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Method Summary	5
Sample Summary	6
Client Sample Results	7
Definitions	8
QC Association	9
QC Sample Results	10
Chain of Custody	11
Receipt Checklists	12
Chronicle	13
Certification Summary	14

Case Narrative

Client: KPRG and Associates, Inc.
Project: Powerton CCR FAB Re-sample

Job ID: 500-244357-1

Job ID: 500-244357-1

Eurofins Chicago

Job Narrative 500-244357-1

Receipt

The sample was received on 12/22/2023 3:08 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.2° C.

Metals

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

1

2

3

4

5

6

7

8

9

10

11

12

13

Method Summary

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

Job ID: 500-244357-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CHI

Protocol References:

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

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

Sample Summary

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

Job ID: 500-244357-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-244357-1	MW-05	Water	12/22/23 11:50	12/22/23 15:08

1

2

3

4

5

6

7

8

9

10

11

12

13

Client Sample Results

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

Job ID: 500-244357-1

Client Sample ID: MW-05
Date Collected: 12/22/23 11:50
Date Received: 12/22/23 15:08

Lab Sample ID: 500-244357-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.4		0.050		mg/L		01/16/24 09:04	01/16/24 17:55	1

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

Definitions/Glossary

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

Job ID: 500-244357-1

Glossary

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

QC Association Summary

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

Job ID: 500-244357-1

Metals

Prep Batch: 750320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-244357-1	MW-05	Total Recoverable	Water	3005A	
MB 500-750320/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-750320/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 750462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-244357-1	MW-05	Total Recoverable	Water	6020B	750320
MB 500-750320/1-A	Method Blank	Total Recoverable	Water	6020B	750320
LCS 500-750320/2-A	Lab Control Sample	Total Recoverable	Water	6020B	750320

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

QC Sample Results

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

Job ID: 500-244357-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-750320/1-A
Matrix: Water
Analysis Batch: 750462

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 750320

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		01/16/24 09:04	01/16/24 17:49	1

Lab Sample ID: LCS 500-750320/2-A
Matrix: Water
Analysis Batch: 750462

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 750320

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.04		mg/L		104	80 - 120



Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-244357-1

Login Number: 244357

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	3.2
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 Re-sample

Job ID: 500-244357-1

Client Sample ID: MW-05
Date Collected: 12/22/23 11:50
Date Received: 12/22/23 15:08

Lab Sample ID: 500-244357-1
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>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total Recoverable	Prep	3005A			750320	BDE	EET CHI	01/16/24 09:04 - 01/16/24 15:04 ¹
Total Recoverable	Analysis	6020B		1	750462	RN	EET CHI	01/16/24 17:55

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

Laboratory References:

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



Accreditation/Certification Summary

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

Job ID: 500-244357-1

Laboratory: Eurofins Chicago

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

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

1

2

3

4

5

6

7

8

9

10

11

12

13