K P R G

ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

CCR COMPLIANCE
ANNUAL GROUNDWATER MONITORING and CORRECTIVE ACTION REPORT - 2020
FORMER ASH BASIN

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

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OVERVIEW

Groundwater monitoring requirements in accordance with the Federal Register, Environmental Protection Agency, 40 CFR Parts 257.94 and 257.95, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule dated April 17, 2015 (CCR Rule) and subsequent amendments, have been completed for the ash pond monitoring wells located at the Midwest Generation, LLC (Midwest Generation) Powerton Generating Station. The wells sampled were selected to meet the monitoring requirements of the CCR Rule for the Former Ash Basin (FAB). The monitoring well network around these ponds 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 2020 groundwater monitoring period is provided in accordance with revised 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 detection monitoring program outlined in Section 257.94.

- 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-01 – fluoride (December only), TDS (December only)
    - MW-02 – pH (December only)
    - MW-03 – boron (December only), fluoride (December only)
    - MW-04 – fluoride
    - MW-05 – chloride (February and December), fluoride, sulfate, and TDS
    - MW-10 – boron, fluoride (December only)

    An Alternate Source Demonstration was completed for the FAB due to previously recorded SSIs. The ASD concluded that based on the observation that the FAB was not a lined impoundment when in operation, definitive alternate source statements could not be made relative to the potential SSIs at downgradient wells. The site was transitioned to assessment monitoring under 257.95 with the first round of assessment monitoring occurring February 24, 2020.

- Section 257.90(e)(6)(iv) – There were no confirmed statistically significant levels (SSLs) above established groundwater protection standards (GWPSs) for the Appendix IV assessment monitoring constituents for this unit during the subject monitoring period.

- Section 257.90(e)(6)(v) – The subject unit is not under corrective action.

- Section 257.90(e)(6)(vi) – The subject unit is not under corrective action.

1.0 INTRODUCTION

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

Based on the results of the initial detection monitoring statistical evaluation completed in 2019, an Alternate Source Demonstration (ASD) was performed and completed on March 09, 2020 in accordance with 40 CFR 257.94(e)(2). The ASD was used to determine if any statistically significant increases (SSIs) may be attributed to leachate from the regulated unit or to another potential source(s) and concluded that contribution from the unlined inactive impoundment to downgradient potential SSIs could not be ruled out. In accordance with Section 257.95 of the CCR Rule, the FAB was transitioned to Assessment Monitoring and a Statistical Evaluation Summary was completed on June 22, 2020 which developed Groundwater Protection Standards (GWPSs) for the previously detected Appendix IV compounds. The ASD and Statistical Evaluation Summary are discussed in sections 4.1 and 4.2 of this report, respectively.

This annual report covers the work performed relative to CCR groundwater monitoring for the FAB during the calendar year 2020. It does not duplicate information or activities previously reported for 2019. 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 provides a discussion of the completed alternate source demonstration and statistical evaluation summary. The annual report for the ABB and ASB, which are also in assessment monitoring, 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 monitoring well MW-10 during the fourth quarter sampling. A duplicate sample was inadvertently omitted in the earlier sampling.

2.2 Groundwater Flow Evaluation

Water level data measurements were obtained from each well during each round of groundwater monitoring. A complete round of water levels was collected prior to initiating sampling, and the water level data are summarized in Table 1. Unlike the CCR monitoring network for the ABB/ASB which includes monitoring wells within both a shallow localized clay/silty clay unit and a deeper more extensive sand unit, all wells associated with the FAB monitoring are screened within the extensive sand unit which underlies the area (i.e., the localized shallow clay/silty clay unit does not extend beneath the FAB). Groundwater flow maps from the sampling performed in 2020 relative to the FAB are provided on Figures 2 through 4.

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:

$$V_s = \frac{K\,dh}{n_e\,dl}$$, 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 of 3.81×10^{-3} (sandy unit) used in Table 2 was obtained from the Hydrogeologic Assessment Report dated February 2011 and prepared by Patrick Engineering. The

estimated effective porosity of the sandy materials (0.35) were obtained from literature (Applied Hydrogeology, Fetter, 1980).

3.0 ANALYTICAL DATA AND STATUS OF EVALUATIONS

3.1 Sampling Summary

The groundwater sampling summary from 2020 is provided in Table 3, in accordance with 257.90 (e)(3).

3.2 Data Summary

In accordance with assessment monitoring requirements, a complete round of CCR well groundwater samples were collected in February 2020 and analyzed for the full list of parameters specified in both Appendix III and Appendix IV of the CCR Rule. This initial round of assessment monitoring data was evaluated and summarized in a letter report dated June 22, 2020 (see discussion in Section 4.2).

In accordance with Section 257.95(d)(1), within 90 days of obtaining the initial assessment results, the FAB CCR wells were resampled for all parameters in Appendix III and all constituents in Appendix IV that were detected in the initial assessment sampling round in February 2020.

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 and Table 5 includes GWPSs for detected Appendix IV constituents. Both tables include the sample dates and whether the specific well is considered upgradient or downgradient relative to groundwater flow and the regulated unit. All duplicate values in the December 2020 sampling event were within an acceptable range with the exception of cobalt and lead. Cobalt had a concentration of 0.0089 mg/L in the investigative sample and 0.0050 mg/L in the duplicate, and lead had a concentration of 0.0023 mg/L in the investigative sample and 0.0013 mg/L in the duplicate. The analytical data packages from these sampling events are provided in Appendix A.

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 OTHER REQUIRED SUBMITTALS

4.1 Statistical Evaluation Summary

Based on the results of the ASD (see Section 4.2), the FAB was transitioned to assessment monitoring. As required under Part 257.95(b), all CCR monitoring wells were sampled and analyzed for Appendix III and Appendix IV parameters. The Appendix IV parameters that were detected during this round of sampling included arsenic, barium, chromium, cobalt, fluoride, lead, molybdenum, radium 226/228, and selenium. Based on the results of the initial assessment sampling, all CCR monitoring wells were sampled again for Appendix III parameters and the detected Appendix IV parameters in accordance with Part 257.95(d)(1).

The initial eight rounds of CCR sampling included analysis of all Appendix IV parameters for the purposes of establishing background statistics. The first eight rounds of Appendix IV monitoring data from upgradient wells MW-01, and MW-10 were statistically evaluated to establish the applicable site specific Groundwater Protection Standards (GWPSs) for the nine detected Appendix IV parameters in accordance with procedures defined in CCR Compliance Statistical Approach for Groundwater Data Evaluation, Midwest Generation Powerton Generating Station dated October 10, 2017 and Part 257.95(h)(1-3) of the CCR Rule. This evaluation was summarized in a letter report titled Statistical Evaluation Summary CCR Groundwater Assessment Monitoring – Former Ash Basin Powerton Generating Station dated June 22, 2020.

The completed assessment monitoring statistical evaluation and data comparison to the established GWPSs for the site indicated that there have been no detections exceeding the GWPS for any Appendix IV parameters at any well locations.

4.2 Alternate Source Demonstration

An ASD for SSIs of Appendix III detection monitoring parameters was completed March 09, 2020 in accordance with Section 257.94(e)(2) for the Powerton Generating Station FAB. As required under section 257.94(e)(2) a full copy of the ASD is provided in Appendix B. Composite ash and water samples were collected from three locations within the FAB and analyzed using the Leaching Environmental Assessment Framework (LEAF) method to determine whether the noted SSIs may be associated with an actual release from the regulated unit(s) or if another potential historical source in the vicinity of the ash ponds may be affecting the local groundwater quality.

It was concluded that based on the observation that the FAB was not a lined impoundment when in operation, definitive alternate source statements could not be made relative to the potential SSIs at downgradient wells. It was recommended that the FAB be shifted from

detection monitoring into assessment monitoring in accordance with Section 257.95 of the CCR Rule.

5.0 SUMMARY/CONCLUSIONS AND RECOMMENDATIONS

The assessment monitoring requirements in accordance with the CCR rule are being successfully met. An ASD was completed for potential SSIs above PLs for various Appendix III parameters at downgradient wells MW-03 and MW-05 and determined that contribution from the regulated unit could not be ruled out. The FAB was transitioned to assessment monitoring and a statistical evaluation was performed to establish GWPSs for previously detected Appendix IV parameters. There have been no recorded detections above established GWPSs for any parameter at any well. At this time, it is recommended that the station remain in semi-annual assessment monitoring in accordance with Section 257.95.

6.0 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.

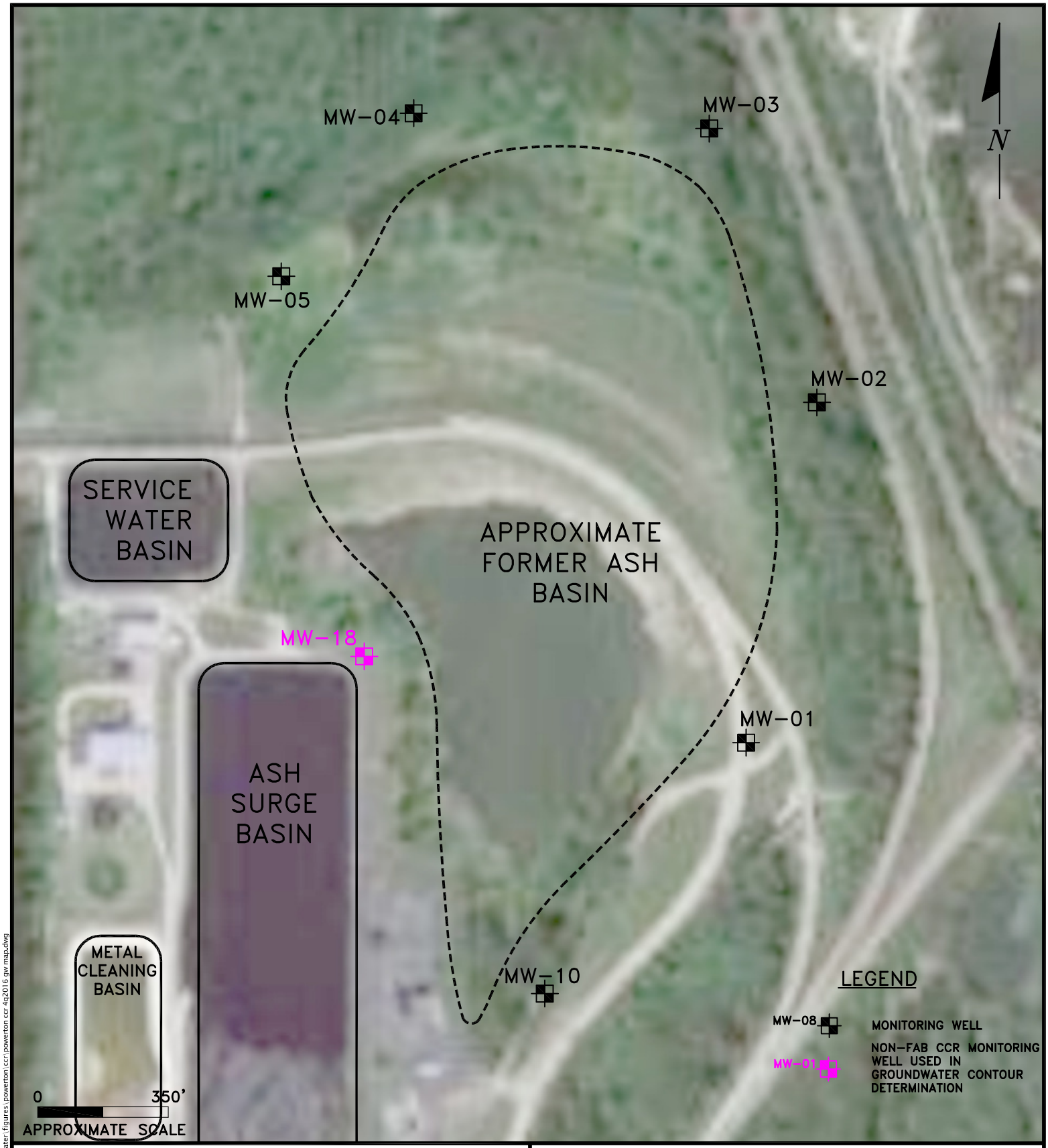
- KPRG and Associates, Inc., Alternate Source Demonstration CCR Groundwater Monitoring – Former Ash Basin Powerton Generating Station. March 9, 2020.

- KPRG and Associates, Inc., CCR Compliance Statistical Evaluation Summary Groundwater Assessment Monitoring Former Ash Basin Powerton Generating Station. June 22, 2020.

- C.W. Fetter, Jr., Applied Hydrogeology. Charles E. Merrill Publishing Co., 1980.

- R.A. Freeze and J.A. Cherry, Groundwater. Prentice-Hall, Inc. Publishing Co., 1979.

FIGURES



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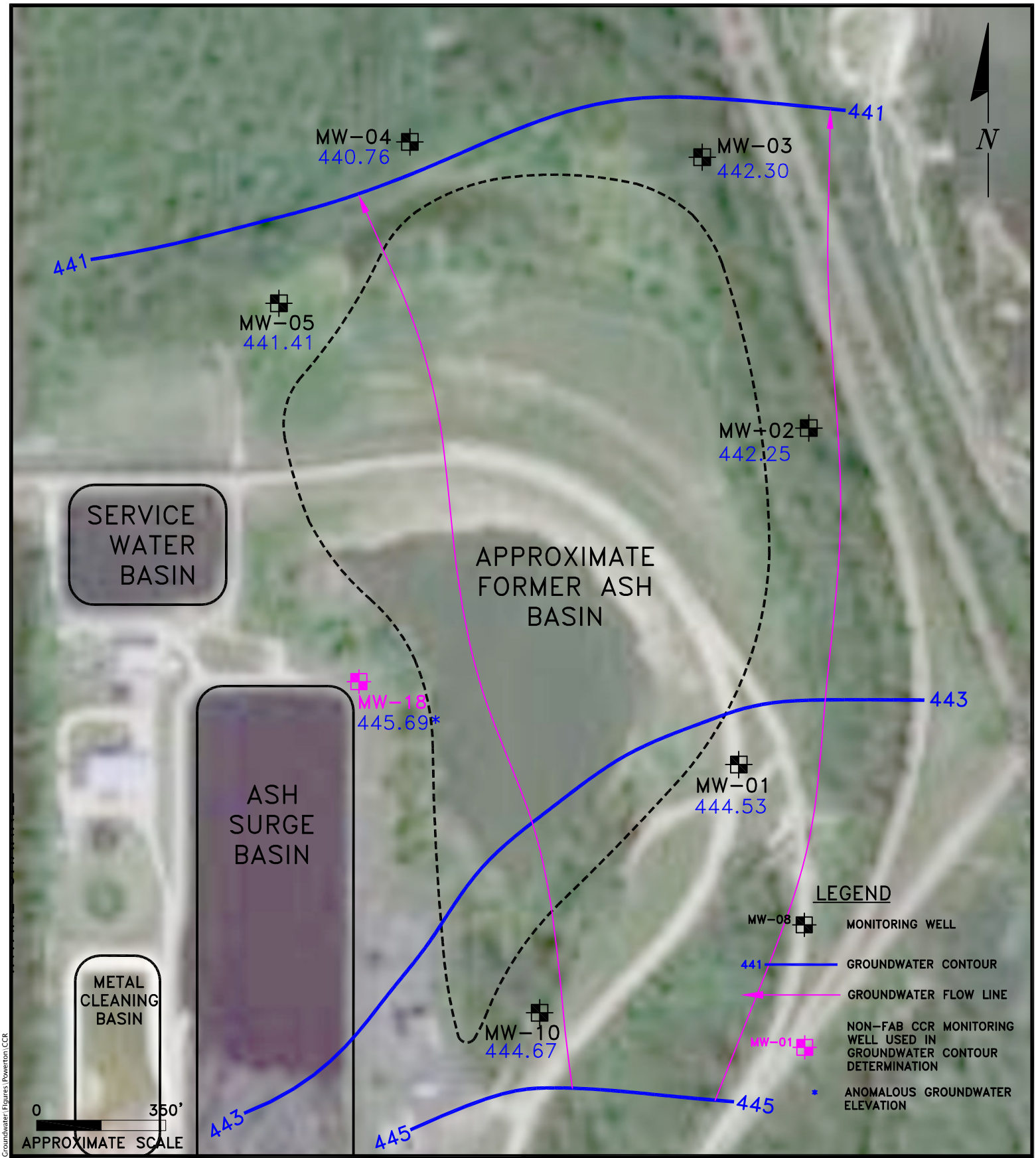
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FORMER ASH BASIN CCR MONITORING WELL SITE MAP

POWERTON STATION
PEKIN, ILLINOIS

Scale: 1" = 350' | Date: January 07, 2019

KPRG Project No. 12313.1 | FIGURE 1



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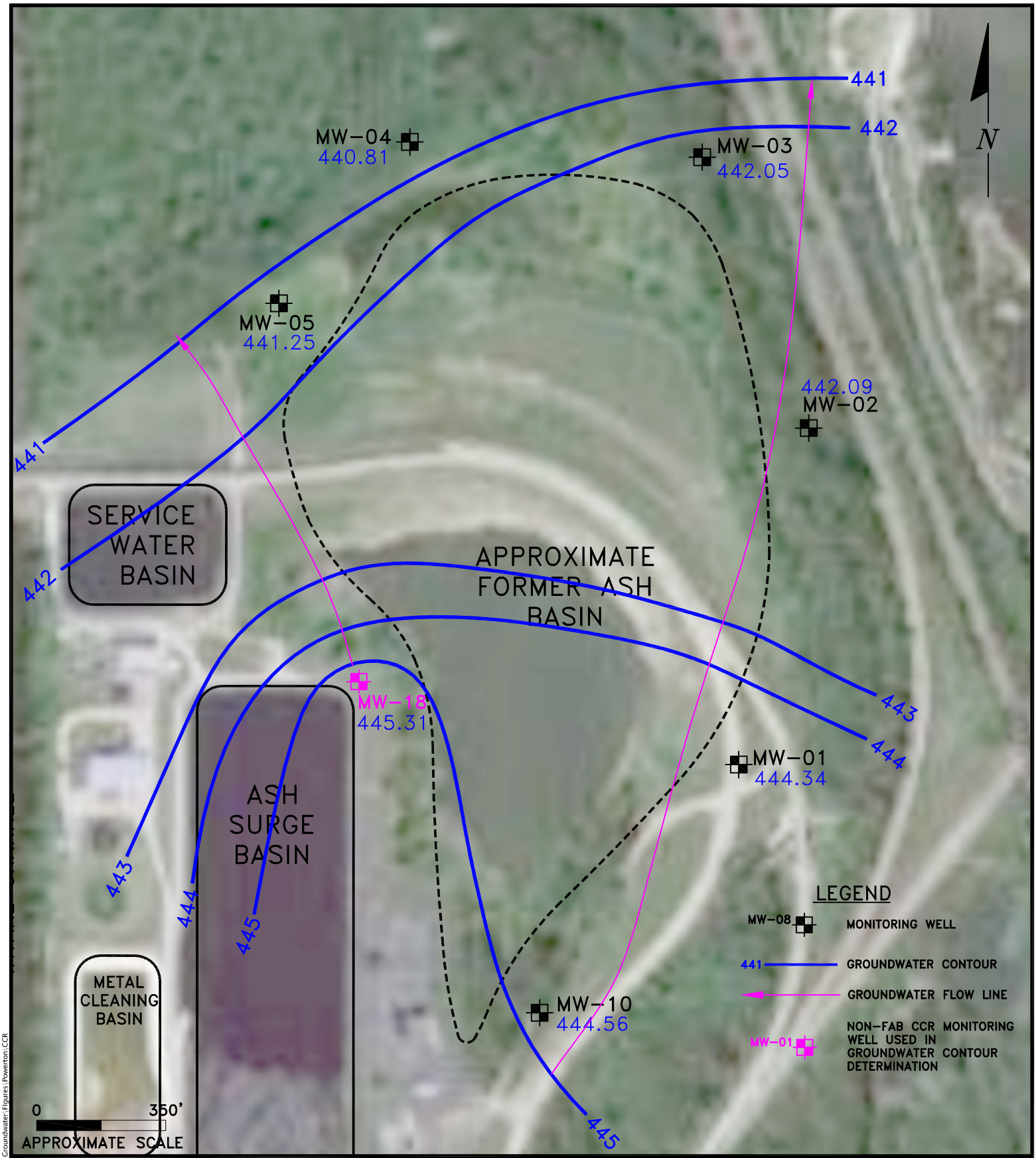
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CCR GROUNDWATER CONTOUR MAP FOR FORMER ASH BASIN 02/2020

POWERTON STATION
PEKIN, ILLINOIS

Scale: 1" = 350' | Date: April 08, 2020

KPRG Project No. 12313.1 | FIGURE 2



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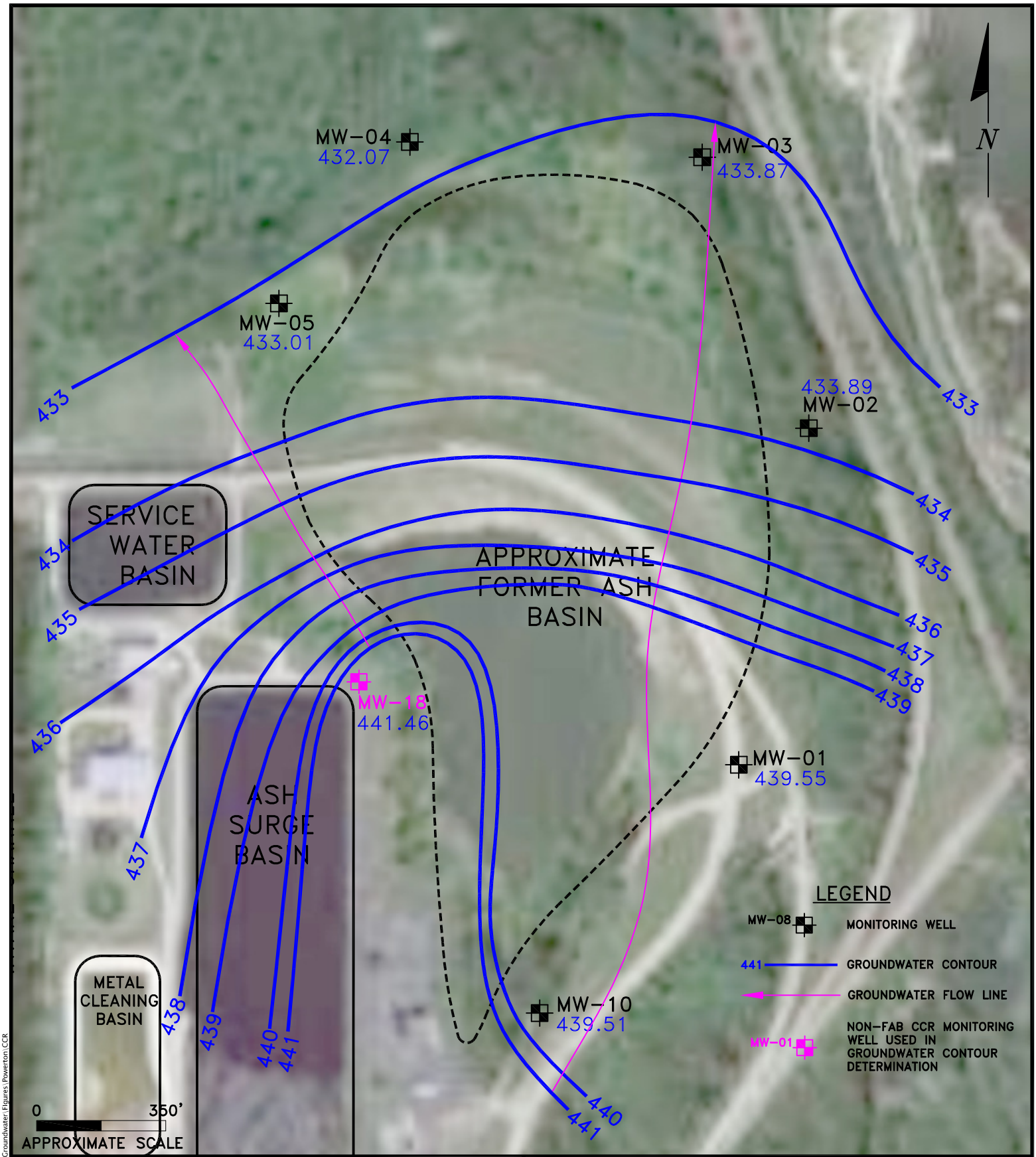
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CCR GROUNDWATER CONTOUR MAP FOR FORMER ASH BASIN 04/2020

POWERTON STATION
PEKIN, ILLINOIS

Scale: 1" = 350' | Date: June 08, 2020

KPRG Project No. 12313.1 | FIGURE 3



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

CCR GROUNDWATER CONTOUR MAP FOR FORMER ASH BASIN 12/2020

POWERTON STATION
PEKIN, ILLINOIS

Scale: 1" = 350' | Date: December 30, 2020

KPRG Project No. 12313.1 | FIGURE 4

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TABLES

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

Well ID	Date	Top of Casing Elevation (ft above MSL)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft above MSL)
MW-01	11/16/2015	465.24	26.04	439.20
	2/22/2016	465.24	21.90	443.34
	5/16/2016	465.24	21.83	443.41
	8/15/2016	465.24	23.89	441.35
	11/14/2016	465.24	23.38	441.86
	2/13/2017	465.24	21.71	443.53
	5/1/2017	465.24	18.87	446.37
	6/20/2017	465.24	21.54	443.70
	8/25/2017	465.24	24.70	440.54
	11/8/2017	465.24	24.92	440.32
	5/17/2018	465.24	22.66	442.58
	8/8/2018	465.24	26.05	439.19
	10/30/2018	465.24	24.69	440.55
	2/25/2019	465.24	19.44	445.80
	4/29/2019	465.24	20.15	445.09
	8/26/2019	465.24	23.85	441.39
	2/24/2020	465.24	20.71	444.53
	4/27/2020	465.24	20.90	444.34
	12/7/2020	465.24	25.69	439.55
MW-02	6/20/2017	462.60	22.04	440.56
	8/23/2017	462.60	28.42	434.18
	11/7/2017	462.60	26.08	436.52
	5/17/2018	462.60	23.26	439.34
	8/7/2018	462.60	29.70	432.90
	10/30/2018	462.60	26.77	435.83
	2/25/2019	462.60	17.02	445.58
	4/29/2019	462.60	19.26	443.34
	8/26/2019	462.60	27.45	435.15
	2/24/2020	462.60	20.35	442.25
	4/27/2020	462.60	20.51	442.09
	12/7/2020	462.60	28.71	433.89
MW-03	6/20/2017	462.48	22.31	440.17
	8/23/2017	462.48	28.18	434.30
	11/7/2017	462.48	25.38	437.10
	5/17/2018	462.48	22.62	439.86
	8/7/2018	462.48	29.17	433.31
	10/30/2018	462.48	24.71	437.77
	2/25/2019	462.48	17.20	445.28
	4/29/2019	462.48	18.85	443.63
	8/26/2019	462.48	27.65	434.83
	2/24/2020	462.48	20.18	442.30
	4/27/2020	462.48	20.43	442.05
	12/7/2020	462.48	28.61	433.87

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

Well ID	Date	Top of Casing Elevation (ft above MSL)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft above MSL)
MW-04	6/20/2017	460.57	22.15	438.42
	8/28/2017	460.57	28.49	432.08
	11/7/2017	460.57	25.62	434.95
	5/17/2018	460.57	24.13	436.44
	8/7/2018	460.57	29.23	431.34
	10/30/2018	460.57	26.58	433.99
	2/25/2019	460.57	15.45	445.12
	4/29/2019	460.57	15.88	444.69
	8/26/2019	460.57	27.35	433.22
	2/24/2020	460.57	19.81	440.76
	4/27/2020	460.57	19.76	440.81
	12/7/2020	460.57	28.50	432.07
MW-05	11/16/2015	458.58	26.39	432.19
	2/22/2016	458.66	21.12	437.54
	5/16/2016	458.66	16.58	442.08
	8/15/2016	458.66	23.59	435.07
	11/14/2016	458.66	22.72	435.94
	2/13/2017	458.66	19.13	439.53
	5/1/2017	458.66	13.09	445.57
	6/20/2017	458.66	19.43	439.15
	8/28/2017	458.66	25.38	433.20
	11/7/2017	458.66	22.91	435.67
	5/17/2018	458.66	21.54	437.04
	8/7/2018	458.66	26.17	432.41
	10/30/2018	458.66	23.97	434.61
	2/25/2019	458.66	13.21	445.45
	4/29/2019	458.66	15.40	443.26
	8/26/2019	458.66	24.35	434.31
	2/24/2020	458.66	17.25	441.41
	4/27/2020	458.66	17.41	441.25
	12/7/2020	458.66	25.65	433.01
MW-10	6/22/2017	457.31	13.46	443.85
	8/24/2017	457.31	16.39	440.92
	11/9/2017	457.31	16.86	440.45
	5/16/2018	457.31	14.88	442.43
	8/8/2018	457.31	17.88	439.43
	10/30/2018	457.31	17.04	440.27
	2/25/2019	457.31	11.28	446.03
	4/29/2019	457.31	11.88	445.43
	8/26/2019	457.31	15.89	441.42
	2/24/2020	457.31	12.64	444.67
	4/27/2020	457.31	12.75	444.56
	12/7/2020	457.31	17.80	439.51

MSL - Mean Sea Level
TOC - Top of Casing

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

DATE	Screened Unit	Groundwater Flow Direction	K_{avg} (ft/sec)*	Average Hydraulic Gradient (ft/ft)	Porosity (unitless)**	Estimated Seepage Velocity (ft/day)
6/20/2017	Sandy	Northeasterly	3.810E-03	0.0032	0.35	3.01
8/25/2017	Sandy	North-Northwest	3.810E-03	0.0127	0.35	11.94
11/8/2017	Sandy	North-Northwest	3.810E-03	0.0066	0.35	6.21
5/17/2018	Sandy	Northerly (Northwest - Northeast)	3.810E-03	0.0037	0.35	3.48
8/7/2018	Sandy	North-Northwest	3.810E-03	0.0059	0.35	5.55
10/30/2018	Sandy	North-Northwest	3.810E-03	0.0063	0.35	5.93
2/25/2019	Sandy	North	3.810E-03	0.0007	0.35	0.66
4/29/2019	Sandy	Northerly (Northwest - Northeast)	3.810E-03	0.0027	0.35	2.54
8/26/2019	Sandy	Northerly (Northwest - Northeast)	3.810E-03	0.0056	0.35	5.27
2/24/2020	Sandy	Northerly (Northwest - Northeast)	3.810E-03	0.0015	0.35	1.41
4/27/2020	Sandy	Northerly (Northwest - Northeast)	3.810E-03	0.0036	0.35	3.39
12/7/2020	Sandy	Northerly (Northwest - Northeast)	3.810E-03	0.0052	0.35	4.89

* K_{avg} - Average hydraulic conductivity for sandy unit (feet/second) from Hydrogeologic Assessment Report, Patrick Engineering, February 2011.
Average hydraulic conductivity for silt/clay unit (feet/second) from Groundwater, Freeze and Cherry, 1979.

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

Table 3. CCR Groundwater Sample Collection Summary for 2020 - 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)	3	2/24/2020	A
		4/28/2020	A
		12/7/2020	A
MW-10 (Upgradient)	3	2/24/2020	A
		4/28/2020	A
		12/8/2020	A
MW-02 (Downgradient)	3	2/24/2020	A
		4/28/2020	A
		12/9/2020	A
MW-03 (Downgradient)	3	2/24/2020	A
		4/28/2020	A
		12/9/2020	A
MW-04 (Downgradient)	3	2/24/2020	A
		4/28/2020	A
		12/9/2020	A
MW-05 (Downgradient)	3	2/24/2020	A
		4/28/2020	A
		12/9/2020	A

Table 4. Detection Monitoring Appendix III Groundwater Analytical Results Thru 2020 - 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**
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
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
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
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
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**

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 otehers are interwell comparisons.

H- Sample was prepped or analyzed beyond specified holding time

Table 5. Appendix IV Groundwater Analytical Results Thru 2020 - Midwest Generation, LLC, Powerton Station, Pekin, IL. Former Ash Basin.

Well	Date	Arsenic	Barium	Chromium	Cobalt	Fluoride	Lead	Molybdenum	Radium 226 + 228 Combined	Selenium
MW-01 up-gradient	11/16/2015	< 0.001	0.057	< 0.005	< 0.001	0.17	* < 0.0005	< 0.0050	0.744	< 0.0025
	2/25/2016	0.0025	0.053	< 0.005	0.0014	0.16	0.0019	< 0.005	< 0.722	0.0029
	5/20/2016	0.0081	0.062	0.007	0.0053	0.17	0.011	< 0.005	< 0.953	< 0.0025
	8/17/2016	0.0014	0.048	< 0.005	< 0.001	0.25	0.0014	0.0057	< 0.491	< 0.0025
	11/16/2016	0.0051	0.056	< 0.005	0.0044	0.21	0.0082	0.0059	< 0.618	< 0.0025
	2/14/2017	0.0041	0.056	< 0.005	0.0045	0.17	0.0076	0.0056	< 0.837	< 0.0025
	5/3/2017	0.0015	0.045	< 0.005	0.0033	0.16	0.0067	< 0.005	0.574	< 0.0025
	6/21/2017	< 0.001	0.040	< 0.005	< 0.001	0.18	< 0.0005	0.0061	< 0.418	< 0.0025
	8/25/2017	< 0.001	0.049	< 0.005	< 0.001	0.18	< 0.0005	0.0059	0.775	< 0.0025
	11/8/2017	< 0.001	0.083	< 0.005	< 0.001	0.12	< 0.0005	< 0.005	0.343	< 0.0025
	5/17/2018	< 0.001	0.045	< 0.005	< 0.001	0.12	0.00068	< 0.005	< 0.396	< 0.0025
	8/8/2018	< 0.001	0.051	< 0.005	< 0.001	0.13	< 0.0005	< 0.005	0.579	< 0.0025
	4/30/2019	0.0014	0.039	< 0.005	< 0.001	0.17	0.0017	< 0.005	< 0.656	< 0.0025
	GWPS	**0.022**	**2.0**	**0.063**	**0.119**	**4.0**	**0.036**	**0.1**	**5.0**	**0.05**
	8/26/2019	< 0.001	0.053	< 0.005	< 0.001	0.13	< 0.0005	< 0.005	0.802	< 0.0025
	2/24/2020	< 0.001	0.044	< 0.005	< 0.001	0.21	0.00057	< 0.005	< 0.478	< 0.0025
	4/28/2020	< 0.001	0.051	< 0.005	< 0.001	0.19	< 0.0005	< 0.005	0.628	< 0.0025
	12/7/2020	< 0.001	0.058	< 0.005	< 0.001	0.25	< 0.0005	0.0052	< 0.542	< 0.0025
MW-10 up-gradient	6/22/2017	0.0023	0.250	< 0.005	0.008	0.19	0.003	< 0.005	0.408	0.0042
	8/24/2017	0.0020	0.220	< 0.005	0.007	0.18	0.003	< 0.005	0.564	0.0044
	11/9/2017	< 0.0010	0.220	< 0.005	0.004	0.18	< 0.001	< 0.005	1.020	0.0034
	5/16/2018	0.0010	0.220	< 0.005	0.021	0.19	0.001	< 0.005	1.550	0.0050
	8/8/2018	0.0012	0.220	< 0.005	0.014	0.19	0.001	< 0.005	< 0.551	0.0062
	10/30/2018	0.0110	0.410	0.024	0.047	0.22	0.023	< 0.005	3.00	0.0046
	2/26/2019	0.0220	0.590	0.063	0.081	0.21	0.036	0.007	4.130	0.0041
	5/1/2019	0.0023	0.270	< 0.005	0.011	0.22	0.0028	< 0.005	1.330	0.0037
	GWPS	**0.022**	**2.0**	**0.063**	**0.119**	**4.0**	**0.036**	**0.1**	**5.0**	**0.05**
	8/26/2019	0.0017	0.190	< 0.005	0.007	0.19	0.0016	< 0.005	1.540	0.0050
	2/25/2020	0.0033	0.280	0.0086	0.011	0.23	0.0046	< 0.005	1.07	0.0058
	4/28/2020	0.0022	0.250	< 0.005	0.0065	0.24	0.0017	< 0.005	0.639	0.0054
	12/8/2020	0.0015	0.280	< 0.005	0.009	0.26	0.0023	< 0.005	1.76	0.0031
MW-02 down-gradient	6/20/2017	0.0012	0.075	< 0.005	< 0.001	0.19	< 0.0005	< 0.005	< 0.341	< 0.0025
	8/23/2017	< 0.001	0.062	< 0.005	< 0.001	0.19	< 0.0005	< 0.005	0.833	< 0.0025
	11/7/2017	0.0014	0.091	< 0.005	< 0.001	0.17	< 0.0005	< 0.005	< 0.309	0.0027
	5/15/2018	0.0013	0.065	< 0.005	< 0.001	0.23	< 0.0005	< 0.005	< 0.408	< 0.0025
	8/7/2018	0.0016	0.067	< 0.005	< 0.001	0.15	< 0.0005	< 0.005	0.622	< 0.0025
	10/30/2018	0.0015	0.067	< 0.005	< 0.001	0.17	< 0.0005	< 0.005	0.564	< 0.0025
	2/26/2019	0.0026	0.041	< 0.005	< 0.001	0.16	0.0013	< 0.005	< 0.425	< 0.0025
	4/30/2019	0.0013	0.048	< 0.005	< 0.001	0.16	< 0.0005	< 0.005	< 0.441	< 0.0025
	GWPS	**0.022**	**2.0**	**0.063**	**0.119**	**4.0**	**0.036**	**0.1**	**5.0**	**0.05**
	8/26/2019	0.0011	0.065	< 0.005	< 0.001	0.18	< 0.0005	< 0.005	1.180	< 0.0025
	2/24/2020	0.0011	0.061	< 0.005	< 0.001	0.20	< 0.0005	< 0.005	0.485	< 0.0025
	4/28/2020	0.0016	0.06	< 0.005	< 0.001	0.20	< 0.0005	< 0.005	< 0.54	< 0.0025
	12/9/2020	< 0.0010	0.076	< 0.005	< 0.001	0.15	< 0.0005	0.006	< 0.471	< 0.0025
MW-03 down-gradient	6/20/2017	0.0013	0.066	< 0.005	< 0.001	0.29	< 0.0005	< 0.005	< 0.325	< 0.0025
	8/23/2017	0.0010	0.066	< 0.005	< 0.001	0.28	< 0.0005	< 0.005	1.200	< 0.0025
	11/7/2017	0.0013	0.068	< 0.005	< 0.001	0.26	< 0.0005	< 0.005	0.588	< 0.0025
	5/15/2018	0.0010	0.059	< 0.005	< 0.001	0.23	< 0.0005	< 0.005	< 0.489	< 0.0025
	8/7/2018	0.0015	0.067	< 0.005	< 0.001	0.22	< 0.0005	< 0.005	< 0.341	< 0.0025
	10/30/2018	0.0014	0.056	< 0.005	< 0.001	0.25	< 0.0005	< 0.005	< 0.354	< 0.0025
	2/26/2019	0.0013	0.054	< 0.005	< 0.001	0.24	0.0007	< 0.005	< 0.399	< 0.0025
	4/30/2019	< 0.001	0.060	< 0.005	< 0.001	0.22	< 0.0005	< 0.005	< 0.668	< 0.0025
	GWPS	**0.022**	**2.0**	**0.063**	**0.119**	**4.0**	**0.036**	**0.1**	**5.0**	**0.05**
	8/26/2019	0.0014	0.069	< 0.005	< 0.001	0.26	< 0.0005	< 0.005	< 0.444	< 0.0025
	2/24/2020	< 0.001	0.066	< 0.005	< 0.001	0.22	< 0.0005	< 0.005	< 0.400	< 0.0025
	4/28/2020	0.0013	0.066	< 0.005	< 0.001	0.22	< 0.0005	< 0.005	< 0.498	0.0036
	12/9/2020	< 0.0010	0.086	< 0.005	< 0.001	0.28	< 0.0005	< 0.005	< 0.432	< 0.0025
MW-04 down-gradient	6/20/2017	< 0.001	0.0025	< 0.005	< 0.001	0.29	< 0.0005	< 0.005	< 0.343	< 0.0025
	8/28/2017	< 0.001	0.028	< 0.005	< 0.001	0.33	< 0.0005	0.013	< 0.246	< 0.0025
	11/7/2017	< 0.001	0.051	< 0.005	< 0.001	0.24	< 0.0005	< 0.005	< 0.332	0.0092
	5/15/2018	< 0.001	0.037	< 0.005	< 0.001	0.27	< 0.0005	< 0.005	0.661	< 0.0025
	8/7/2018	0.0011	0.031	< 0.005	< 0.001	0.32	< 0.0005	0.006	< 0.334	< 0.0025
	10/30/2018	< 0.001	0.049	< 0.005	< 0.001	0.24	< 0.0005	< 0.005	0.423	< 0.0025
	2/26/2019	0.0013	0.033	< 0.005	0.001	0.25	0.0012	< 0.005	0.366	< 0.0025
	4/30/2019	< 0.001	0.026	< 0.005	< 0.001	0.25	< 0.0005	< 0.005	< 0.684	< 0.0025
	GWPS	**0.022**	**2.0**	**0.063**	**0.119**	**4.0**	**0.036**	**0.1**	**5.0**	**0.05**
	8/26/2019	< 0.001	0.032	< 0.005	< 0.001	0.24	< 0.0005	0.008	1.090	< 0.0025
	2/24/2020	< 0.001	0.024	< 0.005	< 0.001	0.20	< 0.0005	< 0.005	0.595	< 0.0025
	4/28/2020	< 0.001	0.025	< 0.005	< 0.001	0.27	< 0.0005	< 0.005	< 0.465	< 0.0025
	12/9/2020	< 0.001	0.034	< 0.005	< 0.001	0.32	< 0.0005	0.008	< 0.411	< 0.0025
MW-05 down-gradient	5/17/2016	< 0.001	0.051	< 0.005	< 0.001	0.35	< 0.0005	< 0.005	< 0.373	< 0.0025
	8/16/2016	< 0.001	0.060	< 0.005	< 0.001	0.30	< 0.0005	< 0.005	< 0.452	< 0.0025
	11/15/2016	< 0.001	0.051	< 0.005	< 0.001	0.23	< 0.0005	< 0.005	0.449	< 0.0025
	2/14/2017	< 0.001	0.062	< 0.005	< 0.001	0.25	0.00091	< 0.005	< 0.359	< 0.0025
	5/1/2017	< 0.001	0.059	< 0.005	< 0.001	0.28	< 0.0005	0.0066	< 0.439	< 0.0025
	6/20/2017	< 0.001	0.048	< 0.005	< 0.001	0.28	< 0.0005	0.0061	< 0.365	< 0.0025
	8/28/2017	< 0.001	0.064	< 0.005	< 0.001	0.33	< 0.0005	0.0085	0.381	< 0.0025
	11/7/2017	< 0.001	0.058	< 0.005	< 0.001	0.31	< 0.0005	< 0.005	< 0.341	< 0.0025
	5/15/2018	< 0.001	0.062	< 0.005	< 0.001	0.29	< 0.0005	< 0.005	< 0.390	< 0.0025
	8/7/2018	< 0.001	0.054	< 0.005	< 0.001	0.32	< 0.0005	0.0069	0.523	< 0.0025
	4/30/2019	< 0.001	0.041	< 0.005	< 0.001	0.36	< 0.0005	0.0061	< 0.709	< 0.0025
	GWPS	**0.022**	**2.0**	**0.063**	**0.119**	**4.0**	**0.036**	**0.1**	**5.0**	**0.05**
	8/26/2019	< 0.001	0.050	< 0.005	< 0.001	0.29	< 0.0005	0.0067	0.651	< 0.0025
	2/24/2020	< 0.001	0.057	< 0.005	< 0.001	0.36	< 0.0005	0.0061	0.506	< 0.0025
	4/28/2020	0.001	0.052	< 0.005	< 0.001	0.37	< 0.0005	0.0074	0.508	< 0.0025
	12/9/2020	< 0.001	0.05	< 0.005	< 0.001	0.31	< 0.0005	0.0072	0.569	< 0.0025

Notes:
All statistics use the detection limit for non-detect results.
All units are in mg/l except Radium is in pCi/L as noted.
State Standards obtained from IAC, Title 35, Chapter I, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I: Potable Resource Groundwater.
Federal Maximum Contaminant Levels (MCLs) obtained from Code of Federal Regulations (CFR) Title 40, Chapter I, Subchapter D, Part 141.

F1 - MS and/or MSD Recovery outside of limits.
NS - No Standard
* - LCS or LCSD is outside acceptance limits.
^ - Denotes instrument related QC exceeds the control limits
DNYA - Data not yet available

APPENDIX A
Analytical Data Packages from 2020 Assessment Monitoring

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 500-178418-1
Client Project/Site: Powerton CCR

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

Attn: Richard Gnat

Diana Mockler

Authorized for release by:
3/19/2020 7:32:27 PM

Diana Mockler, Project Manager I
(219)252-7570
diana.mockler@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Case Narrative

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

Job ID: 500-178418-1

Job ID: 500-178418-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-178418-1

Comments
No additional comments.

Receipt
The samples were received on 2/26/2020 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were -0.9º C and 2.3º C.

Metals
Method 6020A: The low level continuing calibration verification (ICVL/CCVL) associated with batch 500-532318 recovered above the upper control limit for Beryllium. The samples associated with this ICVL/CCVL were non-detects for the affected analyte; therefore, the data have been reported.

Method 6020A: The low level and continuing calibration verification (CCV/CCVL) associated with batch 500-532452 recovered above the upper control limit for Beryllium. The samples associated with this CCV were non-detect for the affected analyte; therefore, the data have been reported.

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

General Chemistry
Method SM 2540C: Reanalysis of the following sample was performed outside of the analytical holding time for TDS. MW-05 (500-178418-6).

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

Detection Summary

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

Job ID: 500-178418-1

Client Sample ID: MW-02 — Lab Sample ID: 500-178418-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0011		0.0010		mg/L	1		6020A	Total Recoverable
Barium	0.061		0.0025		mg/L	1		6020A	Total Recoverable
Boron	0.33		0.050		mg/L	1		6020A	Total Recoverable
Calcium	89		0.20		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	410		10		mg/L	1		SM 2540C	Total/NA
Chloride	53		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.20		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	37		25		mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-03 — Lab Sample ID: 500-178418-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.066		0.0025		mg/L	1		6020A	Total Recoverable
Boron	0.33		0.050		mg/L	1		6020A	Total Recoverable
Calcium	87		0.20		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	470		10		mg/L	1		SM 2540C	Total/NA
Chloride	53		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.22		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	65		25		mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-04 — Lab Sample ID: 500-178418-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.024		0.0025		mg/L	1		6020A	Total Recoverable
Boron	0.34		0.050		mg/L	1		6020A	Total Recoverable
Calcium	81		0.20		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	440		10		mg/L	1		SM 2540C	Total/NA
Chloride	49		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.20		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	67		25		mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-10 — Lab Sample ID: 500-178418-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0033		0.0010		mg/L	1		6020A	Total Recoverable
Barium	0.28		0.0025		mg/L	1		6020A	Total Recoverable
Boron	1.4		0.050		mg/L	1		6020A	Total Recoverable
Calcium	110		0.20		mg/L	1		6020A	Total Recoverable
Chromium	0.0086		0.0050		mg/L	1		6020A	Total Recoverable
Cobalt	0.011		0.0010		mg/L	1		6020A	Total Recoverable

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 500-178418-1

Client Sample ID: MW-10 (Continued)

Lab Sample ID: 500-178418-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0046		0.00050		mg/L	1		6020A	Total Recoverable
Selenium	0.0058		0.0025		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	500		10		mg/L	1		SM 2540C	Total/NA
Chloride	45		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.23		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	59		25		mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-01

Lab Sample ID: 500-178418-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.044		0.0025		mg/L	1		6020A	Total Recoverable
Boron	0.28		0.050		mg/L	1		6020A	Total Recoverable
Calcium	87		0.20		mg/L	1		6020A	Total Recoverable
Lead	0.00057		0.00050		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	410		10		mg/L	1		SM 2540C	Total/NA
Chloride	53		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.21		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	34		5.0		mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-05

Lab Sample ID: 500-178418-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.057		0.0025		mg/L	1		6020A	Total Recoverable
Boron	0.54		0.050		mg/L	1		6020A	Total Recoverable
Calcium	110		0.20		mg/L	1		6020A	Total Recoverable
Molybdenum	0.0061		0.0050		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	700	H	10		mg/L	1		SM 2540C	Total/NA
Chloride	70		10		mg/L	5		SM 4500 Cl- E	Total/NA
Fluoride	0.36		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	120		50		mg/L	10		SM 4500 SO4 E	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

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

Job ID: 500-178418-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CHI
6020A	Metals (ICP/MS)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
SM 4500 SO4 E	Sulfate, Total	SM	TAL PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI
7470A	Preparation, Mercury	SW846	TAL CHI

Protocol References:

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

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

Laboratory References:

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

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

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

Job ID: 500-178418-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-178418-1	MW-02	Water	02/24/20 11:16	02/26/20 09:30	
500-178418-2	MW-03	Water	02/24/20 12:21	02/26/20 09:30	
500-178418-3	MW-04	Water	02/24/20 13:26	02/26/20 09:30	
500-178418-4	MW-10	Water	02/25/20 09:06	02/26/20 09:30	
500-178418-5	MW-01	Water	02/24/20 15:51	02/26/20 09:30	
500-178418-6	MW-05	Water	02/24/20 14:41	02/26/20 09:30	

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

Job ID: 500-178418-1

Client Sample ID: MW-02

Date Collected: 02/24/20 11:16
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-1

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		02/26/20 15:45	02/27/20 10:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/26/20 15:45	03/02/20 18:24	1
Arsenic	**0.0011**		0.0010		mg/L		02/26/20 15:45	03/02/20 18:24	1
Barium	**0.061**		0.0025		mg/L		02/26/20 15:45	03/02/20 18:24	1
Beryllium	<0.0010	^	0.0010		mg/L		02/26/20 15:45	03/02/20 18:24	1
Boron	**0.33**		0.050		mg/L		02/26/20 15:45	03/02/20 18:24	1
Cadmium	<0.00050		0.00050		mg/L		02/26/20 15:45	03/02/20 18:24	1
Calcium	**89**		0.20		mg/L		02/26/20 15:45	03/02/20 18:24	1
Chromium	<0.0050		0.0050		mg/L		02/26/20 15:45	03/02/20 18:24	1
Cobalt	<0.0010		0.0010		mg/L		02/26/20 15:45	03/02/20 18:24	1
Lead	<0.00050		0.00050		mg/L		02/26/20 15:45	03/02/20 18:24	1
Molybdenum	<0.0050		0.0050		mg/L		02/26/20 15:45	03/02/20 18:24	1
Selenium	<0.0025		0.0025		mg/L		02/26/20 15:45	03/02/20 18:24	1
Thallium	<0.0020		0.0020		mg/L		02/26/20 15:45	03/02/20 18:24	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/03/20 09:50	03/04/20 09:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**410**		10		mg/L			03/02/20 03:34	1
Chloride	**53**		2.0		mg/L			03/10/20 16:24	1
Fluoride	**0.20**		0.10		mg/L			03/17/20 12:21	1
Sulfate	**37**		25		mg/L			03/09/20 17:48	5

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

Job ID: 500-178418-1

Client Sample ID: MW-03

Date Collected: 02/24/20 12:21
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-2

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		02/26/20 15:45	02/27/20 10:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/26/20 15:45	03/02/20 18:27	1
Arsenic	<0.0010		0.0010		mg/L		02/26/20 15:45	03/02/20 18:27	1
Barium	**0.066**		0.0025		mg/L		02/26/20 15:45	03/02/20 18:27	1
Beryllium	<0.0010	^	0.0010		mg/L		02/26/20 15:45	03/02/20 18:27	1
Boron	**0.33**		0.050		mg/L		02/26/20 15:45	03/02/20 18:27	1
Cadmium	<0.00050		0.00050		mg/L		02/26/20 15:45	03/02/20 18:27	1
Calcium	**87**		0.20		mg/L		02/26/20 15:45	03/02/20 18:27	1
Chromium	<0.0050		0.0050		mg/L		02/26/20 15:45	03/02/20 18:27	1
Cobalt	<0.0010		0.0010		mg/L		02/26/20 15:45	03/02/20 18:27	1
Lead	<0.00050		0.00050		mg/L		02/26/20 15:45	03/02/20 18:27	1
Molybdenum	<0.0050		0.0050		mg/L		02/26/20 15:45	03/02/20 18:27	1
Selenium	<0.0025		0.0025		mg/L		02/26/20 15:45	03/02/20 18:27	1
Thallium	<0.0020		0.0020		mg/L		02/26/20 15:45	03/02/20 18:27	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/03/20 09:50	03/04/20 09:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**470**		10		mg/L			03/02/20 03:37	1
Chloride	**53**		2.0		mg/L			03/10/20 16:24	1
Fluoride	**0.22**		0.10		mg/L			03/17/20 12:18	1
Sulfate	**65**		25		mg/L			03/09/20 17:48	5

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

Job ID: 500-178418-1

Client Sample ID: MW-04

Date Collected: 02/24/20 13:26
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-3

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		02/26/20 15:45	02/27/20 10:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/26/20 15:45	03/02/20 18:31	1
Arsenic	<0.0010		0.0010		mg/L		02/26/20 15:45	03/02/20 18:31	1
Barium	**0.024**		0.0025		mg/L		02/26/20 15:45	03/02/20 18:31	1
Beryllium	<0.0010	^	0.0010		mg/L		02/26/20 15:45	03/02/20 18:31	1
Boron	**0.34**		0.050		mg/L		02/26/20 15:45	03/02/20 18:31	1
Cadmium	<0.00050		0.00050		mg/L		02/26/20 15:45	03/02/20 18:31	1
Calcium	**81**		0.20		mg/L		02/26/20 15:45	03/02/20 18:31	1
Chromium	<0.0050		0.0050		mg/L		02/26/20 15:45	03/02/20 18:31	1
Cobalt	<0.0010		0.0010		mg/L		02/26/20 15:45	03/02/20 18:31	1
Lead	<0.00050		0.00050		mg/L		02/26/20 15:45	03/02/20 18:31	1
Molybdenum	<0.0050		0.0050		mg/L		02/26/20 15:45	03/02/20 18:31	1
Selenium	<0.0025		0.0025		mg/L		02/26/20 15:45	03/02/20 18:31	1
Thallium	<0.0020		0.0020		mg/L		02/26/20 15:45	03/02/20 18:31	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/03/20 09:50	03/04/20 09:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**440**		10		mg/L			03/02/20 03:40	1
Chloride	**49**		2.0		mg/L			03/10/20 19:16	1
Fluoride	**0.20**		0.10		mg/L			03/17/20 12:11	1
Sulfate	**67**		25		mg/L			03/09/20 17:48	5

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

Job ID: 500-178418-1

Client Sample ID: MW-10

Date Collected: 02/25/20 09:06
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-4

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		02/26/20 15:45	02/27/20 10:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/26/20 15:45	03/02/20 18:34	1
Arsenic	**0.0033**		0.0010		mg/L		02/26/20 15:45	03/02/20 18:34	1
Barium	**0.28**		0.0025		mg/L		02/26/20 15:45	03/02/20 18:34	1
Beryllium	<0.0010	^	0.0010		mg/L		02/26/20 15:45	03/03/20 13:52	1
Boron	**1.4**		0.050		mg/L		02/26/20 15:45	03/02/20 18:34	1
Cadmium	<0.00050		0.00050		mg/L		02/26/20 15:45	03/02/20 18:34	1
Calcium	**110**		0.20		mg/L		02/26/20 15:45	03/02/20 18:34	1
Chromium	**0.0086**		0.0050		mg/L		02/26/20 15:45	03/02/20 18:34	1
Cobalt	**0.011**		0.0010		mg/L		02/26/20 15:45	03/02/20 18:34	1
Lead	**0.0046**		0.00050		mg/L		02/26/20 15:45	03/02/20 18:34	1
Molybdenum	<0.0050		0.0050		mg/L		02/26/20 15:45	03/02/20 18:34	1
Selenium	**0.0058**		0.0025		mg/L		02/26/20 15:45	03/02/20 18:34	1
Thallium	<0.0020		0.0020		mg/L		02/26/20 15:45	03/02/20 18:34	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/03/20 09:50	03/04/20 09:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**500**		10		mg/L			03/02/20 03:42	1
Chloride	**45**		2.0		mg/L			03/10/20 19:19	1
Fluoride	**0.23**		0.10		mg/L			03/17/20 12:08	1
Sulfate	**59**		25		mg/L			03/09/20 17:48	5

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

Job ID: 500-178418-1

Client Sample ID: MW-01

Date Collected: 02/24/20 15:51
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-5

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		02/26/20 15:45	02/27/20 10:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/26/20 15:45	03/02/20 18:38	1
Arsenic	<0.0010		0.0010		mg/L		02/26/20 15:45	03/02/20 18:38	1
Barium	**0.044**		0.0025		mg/L		02/26/20 15:45	03/02/20 18:38	1
Beryllium	<0.0010	^	0.0010		mg/L		02/26/20 15:45	03/02/20 18:38	1
Boron	**0.28**		0.050		mg/L		02/26/20 15:45	03/02/20 18:38	1
Cadmium	<0.00050		0.00050		mg/L		02/26/20 15:45	03/02/20 18:38	1
Calcium	**87**		0.20		mg/L		02/26/20 15:45	03/02/20 18:38	1
Chromium	<0.0050		0.0050		mg/L		02/26/20 15:45	03/02/20 18:38	1
Cobalt	<0.0010		0.0010		mg/L		02/26/20 15:45	03/02/20 18:38	1
Lead	**0.00057**		0.00050		mg/L		02/26/20 15:45	03/02/20 18:38	1
Molybdenum	<0.0050		0.0050		mg/L		02/26/20 15:45	03/02/20 18:38	1
Selenium	<0.0025		0.0025		mg/L		02/26/20 15:45	03/02/20 18:38	1
Thallium	<0.0020		0.0020		mg/L		02/26/20 15:45	03/02/20 18:38	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/03/20 09:50	03/04/20 09:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**410**		10		mg/L			03/02/20 03:45	1
Chloride	**53**		2.0		mg/L			03/10/20 19:19	1
Fluoride	**0.21**		0.10		mg/L			03/17/20 12:02	1
Sulfate	**34**		5.0		mg/L			03/09/20 17:27	1

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

Job ID: 500-178418-1

Client Sample ID: MW-05

Date Collected: 02/24/20 14:41
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-6

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		02/26/20 15:45	02/27/20 10:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/26/20 15:45	03/02/20 18:41	1
Arsenic	<0.0010		0.0010		mg/L		02/26/20 15:45	03/02/20 18:41	1
Barium	**0.057**		0.0025		mg/L		02/26/20 15:45	03/02/20 18:41	1
Beryllium	<0.0010	^	0.0010		mg/L		02/26/20 15:45	03/02/20 18:41	1
Boron	**0.54**		0.050		mg/L		02/26/20 15:45	03/02/20 18:41	1
Cadmium	<0.00050		0.00050		mg/L		02/26/20 15:45	03/02/20 18:41	1
Calcium	**110**		0.20		mg/L		02/26/20 15:45	03/02/20 18:41	1
Chromium	<0.0050		0.0050		mg/L		02/26/20 15:45	03/02/20 18:41	1
Cobalt	<0.0010		0.0010		mg/L		02/26/20 15:45	03/02/20 18:41	1
Lead	<0.00050		0.00050		mg/L		02/26/20 15:45	03/02/20 18:41	1
Molybdenum	**0.0061**		0.0050		mg/L		02/26/20 15:45	03/02/20 18:41	1
Selenium	<0.0025		0.0025		mg/L		02/26/20 15:45	03/02/20 18:41	1
Thallium	<0.0020		0.0020		mg/L		02/26/20 15:45	03/02/20 18:41	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/03/20 09:50	03/04/20 09:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**700**	**H**	10		mg/L			03/11/20 11:23	1
Chloride	**70**		10		mg/L			03/19/20 15:50	5
Fluoride	**0.36**		0.10		mg/L			03/17/20 11:56	1
Sulfate	**120**		50		mg/L			03/09/20 17:52	10

Definitions/Glossary

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

Job ID: 500-178418-1

Qualifiers

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Metals

Prep Batch: 531594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-178418-1	MW-02	Total Recoverable	Water	3005A	
500-178418-2	MW-03	Total Recoverable	Water	3005A	
500-178418-3	MW-04	Total Recoverable	Water	3005A	
500-178418-4	MW-10	Total Recoverable	Water	3005A	
500-178418-5	MW-01	Total Recoverable	Water	3005A	
500-178418-6	MW-05	Total Recoverable	Water	3005A	
MB 500-531594/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-531594/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 531838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-178418-1	MW-02	Total Recoverable	Water	6010C	531594
500-178418-2	MW-03	Total Recoverable	Water	6010C	531594
500-178418-3	MW-04	Total Recoverable	Water	6010C	531594
500-178418-4	MW-10	Total Recoverable	Water	6010C	531594
500-178418-5	MW-01	Total Recoverable	Water	6010C	531594
500-178418-6	MW-05	Total Recoverable	Water	6010C	531594
MB 500-531594/1-A	Method Blank	Total Recoverable	Water	6010C	531594
LCS 500-531594/2-A	Lab Control Sample	Total Recoverable	Water	6010C	531594

Prep Batch: 532316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-178418-1	MW-02	Total/NA	Water	7470A	
500-178418-2	MW-03	Total/NA	Water	7470A	
500-178418-3	MW-04	Total/NA	Water	7470A	
500-178418-4	MW-10	Total/NA	Water	7470A	
500-178418-5	MW-01	Total/NA	Water	7470A	
500-178418-6	MW-05	Total/NA	Water	7470A	
MB 500-532316/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-532316/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-178418-5 MS	MW-01	Total/NA	Water	7470A	
500-178418-5 MSD	MW-01	Total/NA	Water	7470A	
500-178418-5 DU	MW-01	Total/NA	Water	7470A	

Analysis Batch: 532318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-178418-1	MW-02	Total Recoverable	Water	6020A	531594
500-178418-2	MW-03	Total Recoverable	Water	6020A	531594
500-178418-3	MW-04	Total Recoverable	Water	6020A	531594
500-178418-4	MW-10	Total Recoverable	Water	6020A	531594
500-178418-5	MW-01	Total Recoverable	Water	6020A	531594
500-178418-6	MW-05	Total Recoverable	Water	6020A	531594
MB 500-531594/1-A	Method Blank	Total Recoverable	Water	6020A	531594
LCS 500-531594/2-A	Lab Control Sample	Total Recoverable	Water	6020A	531594

Analysis Batch: 532452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-178418-4	MW-10	Total Recoverable	Water	6020A	531594

Metals

Analysis Batch: 532470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-178418-1	MW-02	Total/NA	Water	7470A	532316
500-178418-2	MW-03	Total/NA	Water	7470A	532316
500-178418-3	MW-04	Total/NA	Water	7470A	532316
500-178418-4	MW-10	Total/NA	Water	7470A	532316
500-178418-5	MW-01	Total/NA	Water	7470A	532316
500-178418-6	MW-05	Total/NA	Water	7470A	532316
MB 500-532316/12-A	Method Blank	Total/NA	Water	7470A	532316
LCS 500-532316/13-A	Lab Control Sample	Total/NA	Water	7470A	532316
500-178418-5 MS	MW-01	Total/NA	Water	7470A	532316
500-178418-5 MSD	MW-01	Total/NA	Water	7470A	532316
500-178418-5 DU	MW-01	Total/NA	Water	7470A	532316

General Chemistry

Analysis Batch: 481170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-178418-1	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-178418-2	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-178418-3	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-178418-4	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-178418-5	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-178418-6	MW-05	Total/NA	Water	SM 4500 SO4 E	
MB 400-481170/17	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-481170/18	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
LCSD 400-481170/24	Lab Control Sample Dup	Total/NA	Water	SM 4500 SO4 E	
MRL 400-481170/14	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 532036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-178418-1	MW-02	Total/NA	Water	SM 2540C	
500-178418-2	MW-03	Total/NA	Water	SM 2540C	
500-178418-3	MW-04	Total/NA	Water	SM 2540C	
500-178418-4	MW-10	Total/NA	Water	SM 2540C	
500-178418-5	MW-01	Total/NA	Water	SM 2540C	
MB 500-532036/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-532036/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 533356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-178418-1	MW-02	Total/NA	Water	SM 4500 Cl- E	
500-178418-2	MW-03	Total/NA	Water	SM 4500 Cl- E	
MB 500-533356/12	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-533356/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 533366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-178418-3	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-178418-4	MW-10	Total/NA	Water	SM 4500 Cl- E	
500-178418-5	MW-01	Total/NA	Water	SM 4500 Cl- E	
MB 500-533366/12	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-533366/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

General Chemistry (Continued)

Analysis Batch: 533366 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-178418-3 MS	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-178418-3 MSD	MW-04	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 533510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-178418-6	MW-05	Total/NA	Water	SM 2540C	
MB 500-533510/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-533510/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-178418-6 DU	MW-05	Total/NA	Water	SM 2540C	

Analysis Batch: 534280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-178418-1	MW-02	Total/NA	Water	SM 4500 F C	
500-178418-2	MW-03	Total/NA	Water	SM 4500 F C	
500-178418-3	MW-04	Total/NA	Water	SM 4500 F C	
500-178418-4	MW-10	Total/NA	Water	SM 4500 F C	
500-178418-5	MW-01	Total/NA	Water	SM 4500 F C	
500-178418-6	MW-05	Total/NA	Water	SM 4500 F C	
MB 500-534280/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-534280/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 534640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-178418-6	MW-05	Total/NA	Water	SM 4500 Cl- E	
MB 500-534640/12	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-534640/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-178418-6 MS	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-178418-6 MSD	MW-05	Total/NA	Water	SM 4500 Cl- E	

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-531594/1-A
Matrix: Water
Analysis Batch: 531838

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 531594

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		02/26/20 15:45	02/27/20 10:04	1

Lab Sample ID: LCS 500-531594/2-A
Matrix: Water
Analysis Batch: 531838

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 531594

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.505		mg/L		101	80 - 120

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-531594/1-A
Matrix: Water
Analysis Batch: 532318

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 531594

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		02/26/20 15:45	03/02/20 17:37	1
Arsenic	<0.0010		0.0010		mg/L		02/26/20 15:45	03/02/20 17:37	1
Barium	<0.0025		0.0025		mg/L		02/26/20 15:45	03/02/20 17:37	1
Beryllium	<0.0010	^	0.0010		mg/L		02/26/20 15:45	03/02/20 17:37	1
Boron	<0.050		0.050		mg/L		02/26/20 15:45	03/02/20 17:37	1
Cadmium	<0.00050		0.00050		mg/L		02/26/20 15:45	03/02/20 17:37	1
Calcium	<0.20		0.20		mg/L		02/26/20 15:45	03/02/20 17:37	1
Chromium	<0.0050		0.0050		mg/L		02/26/20 15:45	03/02/20 17:37	1
Cobalt	<0.0010		0.0010		mg/L		02/26/20 15:45	03/02/20 17:37	1
Lead	<0.00050		0.00050		mg/L		02/26/20 15:45	03/02/20 17:37	1
Molybdenum	<0.0050		0.0050		mg/L		02/26/20 15:45	03/02/20 17:37	1
Selenium	<0.0025		0.0025		mg/L		02/26/20 15:45	03/02/20 17:37	1
Thallium	<0.0020		0.0020		mg/L		02/26/20 15:45	03/02/20 17:37	1

Lab Sample ID: LCS 500-531594/2-A
Matrix: Water
Analysis Batch: 532318

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 531594

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.500	0.469		mg/L		94	80 - 120
Arsenic	0.100	0.0977		mg/L		98	80 - 120
Barium	2.00	1.99		mg/L		99	80 - 120
Beryllium	0.0500	0.0436	^	mg/L		87	80 - 120
Boron	1.00	1.02		mg/L		102	80 - 120
Cadmium	0.0500	0.0469		mg/L		94	80 - 120
Calcium	10.0	10.5		mg/L		105	80 - 120
Chromium	0.200	0.190		mg/L		95	80 - 120
Cobalt	0.500	0.486		mg/L		97	80 - 120
Lead	0.100	0.0973		mg/L		97	80 - 120
Molybdenum	1.00	0.949		mg/L		95	80 - 120
Selenium	0.100	0.100		mg/L		100	80 - 120
Thallium	0.100	0.103		mg/L		103	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-532316/12-A
Matrix: Water
Analysis Batch: 532470

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 532316

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/03/20 09:50	03/04/20 09:30	1

Lab Sample ID: LCS 500-532316/13-A
Matrix: Water
Analysis Batch: 532470

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 532316

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00213		mg/L		106	80 - 120

Lab Sample ID: 500-178418-5 MS
Matrix: Water
Analysis Batch: 532470

Client Sample ID: MW-01
Prep Type: Total/NA
Prep Batch: 532316

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.00020		0.00100	0.00109		mg/L		109	75 - 125

Lab Sample ID: 500-178418-5 MSD
Matrix: Water
Analysis Batch: 532470

Client Sample ID: MW-01
Prep Type: Total/NA
Prep Batch: 532316

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00020		0.00100	0.00109		mg/L		109	75 - 125	0	20

Lab Sample ID: 500-178418-5 DU
Matrix: Water
Analysis Batch: 532470

Client Sample ID: MW-01
Prep Type: Total/NA
Prep Batch: 532316

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 500-532036/1
Matrix: Water
Analysis Batch: 532036

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			03/02/20 02:51	1

Lab Sample ID: LCS 500-532036/2
Matrix: Water
Analysis Batch: 532036

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	254		mg/L		102	80 - 120

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

Lab Sample ID: MB 500-533510/1
Matrix: Water
Analysis Batch: 533510

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			03/11/20 11:18	1

Lab Sample ID: LCS 500-533510/2
Matrix: Water
Analysis Batch: 533510

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	254		mg/L		102	80 - 120

Lab Sample ID: 500-178418-6 DU
Matrix: Water
Analysis Batch: 533510

Client Sample ID: MW-05
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	700	H	718		mg/L		2	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-533356/12
Matrix: Water
Analysis Batch: 533356

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			03/10/20 16:24	1

Lab Sample ID: LCS 500-533356/13
Matrix: Water
Analysis Batch: 533356

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	51.7		mg/L		103	85 - 115

Lab Sample ID: MB 500-533366/12
Matrix: Water
Analysis Batch: 533366

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			03/10/20 19:13	1

Lab Sample ID: LCS 500-533366/13
Matrix: Water
Analysis Batch: 533366

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	53.0		mg/L		106	85 - 115

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

Lab Sample ID: 500-178418-3 MS
Matrix: Water
Analysis Batch: 533366

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		
Chloride	49		50.0	89.9		mg/L		81	75 - 125		

Lab Sample ID: 500-178418-3 MSD
Matrix: Water
Analysis Batch: 533366

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
Chloride	49		50.0	91.8		mg/L		85	75 - 125	2	20

Lab Sample ID: MB 500-534640/12
Matrix: Water
Analysis Batch: 534640

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			03/19/20 15:50	1

Lab Sample ID: LCS 500-534640/13
Matrix: Water
Analysis Batch: 534640

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			50.0	50.4		mg/L		101	85 - 115		

Lab Sample ID: 500-178418-6 MS
Matrix: Water
Analysis Batch: 534640

Client Sample ID: MW-05
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	70		50.0	121		mg/L		102	75 - 125		

Lab Sample ID: 500-178418-6 MSD
Matrix: Water
Analysis Batch: 534640

Client Sample ID: MW-05
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	70		50.0	121		mg/L		102	75 - 125	0	20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-534280/3
Matrix: Water
Analysis Batch: 534280

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			03/17/20 10:51	1

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

Job ID: 500-178418-1

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 500-534280/4
Matrix: Water
Analysis Batch: 534280

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	10.9		mg/L		109	80 - 120

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-481170/17
Matrix: Water
Analysis Batch: 481170

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			03/09/20 16:11	1

Lab Sample ID: LCS 400-481170/18
Matrix: Water
Analysis Batch: 481170

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	14.9		mg/L		99	90 - 110

Lab Sample ID: MRL 400-481170/14
Matrix: Water
Analysis Batch: 481170

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	5.18		mg/L		104	50 - 150

Lab Chronicle

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

Job ID: 500-178418-1

Client Sample ID: MW-02

Lab Sample ID: 500-178418-1

Date Collected: 02/24/20 11:16

Matrix: Water

Date Received: 02/26/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			531594	02/26/20 15:45	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	531838	02/27/20 10:13	JEF	TAL CHI
Total Recoverable	Prep	3005A			531594	02/26/20 15:45	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	532318	03/02/20 18:24	FXG	TAL CHI
Total/NA	Prep	7470A			532316	03/03/20 09:50	MJG	TAL CHI
Total/NA	Analysis	7470A		1	532470	03/04/20 09:33	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	532036	03/02/20 03:34	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	533356	03/10/20 16:24	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	534280	03/17/20 12:21	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	481170	03/09/20 17:48	HES	TAL PEN

Client Sample ID: MW-03

Lab Sample ID: 500-178418-2

Date Collected: 02/24/20 12:21

Matrix: Water

Date Received: 02/26/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			531594	02/26/20 15:45	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	531838	02/27/20 10:17	JEF	TAL CHI
Total Recoverable	Prep	3005A			531594	02/26/20 15:45	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	532318	03/02/20 18:27	FXG	TAL CHI
Total/NA	Prep	7470A			532316	03/03/20 09:50	MJG	TAL CHI
Total/NA	Analysis	7470A		1	532470	03/04/20 09:44	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	532036	03/02/20 03:37	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	533356	03/10/20 16:24	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	534280	03/17/20 12:18	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	481170	03/09/20 17:48	HES	TAL PEN

Client Sample ID: MW-04

Lab Sample ID: 500-178418-3

Date Collected: 02/24/20 13:26

Matrix: Water

Date Received: 02/26/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			531594	02/26/20 15:45	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	531838	02/27/20 10:22	JEF	TAL CHI
Total Recoverable	Prep	3005A			531594	02/26/20 15:45	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	532318	03/02/20 18:31	FXG	TAL CHI
Total/NA	Prep	7470A			532316	03/03/20 09:50	MJG	TAL CHI
Total/NA	Analysis	7470A		1	532470	03/04/20 09:46	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	532036	03/02/20 03:40	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	533366	03/10/20 19:16	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	534280	03/17/20 12:11	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	481170	03/09/20 17:48	HES	TAL PEN

Lab Chronicle

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

Job ID: 500-178418-1

Client Sample ID: MW-10

Date Collected: 02/25/20 09:06
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			531594	02/26/20 15:45	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	531838	02/27/20 10:27	JEF	TAL CHI
Total Recoverable	Prep	3005A			531594	02/26/20 15:45	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	532318	03/02/20 18:34	FXG	TAL CHI
Total Recoverable	Prep	3005A			531594	02/26/20 15:45	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	532452	03/03/20 13:52	FXG	TAL CHI
Total/NA	Prep	7470A			532316	03/03/20 09:50	MJG	TAL CHI
Total/NA	Analysis	7470A		1	532470	03/04/20 09:47	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	532036	03/02/20 03:42	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	533366	03/10/20 19:19	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	534280	03/17/20 12:08	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	481170	03/09/20 17:48	HES	TAL PEN

Client Sample ID: MW-01

Date Collected: 02/24/20 15:51
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			531594	02/26/20 15:45	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	531838	02/27/20 10:31	JEF	TAL CHI
Total Recoverable	Prep	3005A			531594	02/26/20 15:45	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	532318	03/02/20 18:38	FXG	TAL CHI
Total/NA	Prep	7470A			532316	03/03/20 09:50	MJG	TAL CHI
Total/NA	Analysis	7470A		1	532470	03/04/20 09:49	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	532036	03/02/20 03:45	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	533366	03/10/20 19:19	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	534280	03/17/20 12:02	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		1	481170	03/09/20 17:27	HES	TAL PEN

Client Sample ID: MW-05

Date Collected: 02/24/20 14:41
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			531594	02/26/20 15:45	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	531838	02/27/20 10:36	JEF	TAL CHI
Total Recoverable	Prep	3005A			531594	02/26/20 15:45	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	532318	03/02/20 18:41	FXG	TAL CHI
Total/NA	Prep	7470A			532316	03/03/20 09:50	MJG	TAL CHI
Total/NA	Analysis	7470A		1	532470	03/04/20 09:56	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	533510	03/11/20 11:23	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	534640	03/19/20 15:50	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	534280	03/17/20 11:56	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	481170	03/09/20 17:52	HES	TAL PEN

Lab Chronicle

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

Job ID: 500-178418-1

Laboratory References:

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

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Accreditation/Certification Summary

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

Job ID: 500-178418-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-20

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-30-20
New York	NELAP Secondary AB	12115	04-01-20
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

TestAmerica Chicago
2417 Bond Street

University Park, IL 60484-3101
phone 708.534.5200 fax 708.534.5211

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Rich Gnat	Site Contact: Mitchel Dolan	Date: 2/25/20	COC No:
KPRG and Associates, Inc.	Tel/Fax: (262) 781-0475	Lab Contact: Eric Lang	Carrier: FedEx	1 of 1 COCs
14665 West Lisbon Road, Suite 1A	Analysis Turnaround Time			Sampler:
Brookfield, WI 53154	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
(262) 781-0475 Phone	TAT if different from Below _____			Walk-in Client:
(262) 781-0478 FAX	☐ 2 weeks			Lab Sampling:
Project Name: Powerton CCR	☐ 1 week			
Site: Powerton Station - Pekin, IL	☐ 2 days			Job / SDG No.: 500-178418
P O # 12313.1	☐ 1 day			

500-178418 COC

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Total Metals	Cl, Fl, SO4, TDS	Radium 226/228	Sample Specific Notes:
1	MW-02 ~~MW-02~~			G	W	5	N	N	x	x	x	
2	-03 ~~MW-03~~			G	W	5	N	N	x	x	x	
3	-04 ~~MW-04~~			G	W	5	N	N	x	x	x	
4	-10 MW-10	2/25	0926	G	W	5	N	N	x	x	x	
5	-01 ~~MW-01~~			G	W	5	N	N	x	x	x	
6	-05 ~~MW-05~~			G	W	5	N	N	x	x	x	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

4 1 4

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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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 & Comments:

-1.9 -0.9
1.3 2.3

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 1.3 Corr'd: 2.3 | Therm ID No.:

	Company	Date/Time		Company	Date/Time
Relinquished by: Mitchel Dolan	Company: KPRG	Date/Time: 2/25/1530	Received by: FEDEX	Company:	Date/Time: 2/25/1530
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA	Date/Time: 2/26/20 0930

Form No. CA-C-WI-002, Rev. 4.18, dated 9/5/2018

Chain of Custody Record

387173 eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager:	Site Contact: M. Athel Dolan	Date: 2/26/20	COC No:
Company Name: KPRG	Tel/Email:	Lab Contact: Eric Lang	Carrier: FEDEX	___ of ___ COCs
Address: 1515 W Lisbon Rd Ste 114	Analysis Turnaround Time			Sampler:
City/State/Zip: Brookfield, WI 53005	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 262-781-0475	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Powerton FAB CCR	☐ 1 week			
Site: Powerton	☐ 2 days			Job / SDG No.: 500-178418
P O #	☐ 1 day			

500-178418 COC

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Total Metals	Cl, Fl, SO4, TDS	Rad 226/228	Sample Specific Notes:
5	MW-01	2/24	1551	G	W	5	N	N	X	X	X	
1	MW-02	2/24	1116									
2	MW-03	2/24	1221									
3	MW-04	2/24	1326									
6	MW-05	2/24	1441									
4	MW-10	2/25	0906									
									4	1	4	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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 & Comments:
Amended FAB CCR COC ; Appendix III and IV Parameters

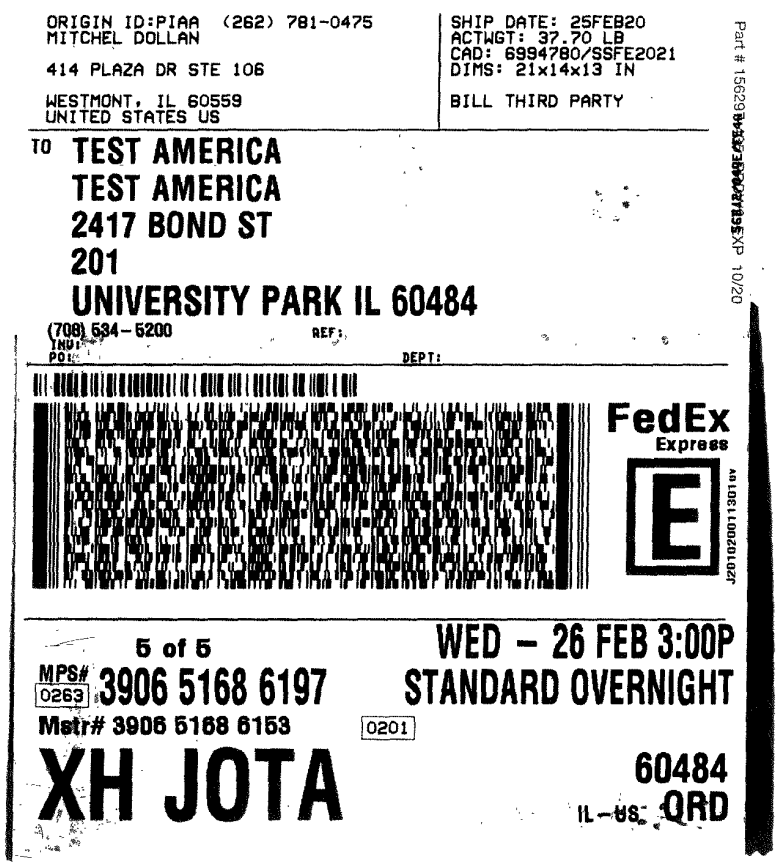
Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

	Company:	Date/Time:		Company:	Date/Time:
Relinquished by: M. Athel Dolan	KPRG	2/26	Received by:		2/26/20 0950
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:



500-178418 Wayt





ORIGIN ID:PIAA (262) 781-0475
MITCHEL DOLLAN

414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 25FEB20
ACTWGT: 37.70 LB
CAD: 6994780/SSFE2021
DIMS: 21x14x13 IN

BILL THIRD PARTY

TO TEST AMERICA
TEST AMERICA
2417 BOND ST
201
UNIVERSITY PARK IL 60484

(708) 534-6200 REF:
INV:
PO: DEPT:

FedEx Express

5 of 5

MPS# 0263 3906 5168 6197

Mstr# 3906 5168 6153 0201

WED - 26 FEB 3:00P
STANDARD OVERNIGHT

XH JOTA

60484
IL-US ORD

Part # 156291-XXXX XXX XXP 10/20

3 lbs.

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-132453.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-178418-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 3/13/2020			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Powerton CCR	Project #: 50011612			
Site: MWG - Powerton	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	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)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-02 (500-178418-1)	2/24/20	11:16 Central		Water			X	1	
MW-03 (500-178418-2)	2/24/20	12:21 Central		Water			X	1	
MW-04 (500-178418-3)	2/24/20	13:26 Central		Water			X	1	
MW-10 (500-178418-4)	2/25/20	09:06 Central		Water			X	1	
MW-01 (500-178418-5)	2/24/20	15:51 Central		Water			X	1	
MW-05 (500-178418-6)	2/24/20	14:41 Central		Water			X	1	

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

Possible Hazard Identification *Unconfirmed*	***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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	2/26/20 1600	TA	Kathy Raines	2-27-20 925	ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.1°C IR8

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-178418-1

Login Number: 178418
List Number: 1
Creator: James, Jeff A

List Source: Eurofins TestAmerica, 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	2.3,-0.9(samples not frozen)
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-178418-1

Login Number: 178418
List Number: 2
Creator: Avery, Kathy R

List Source: Eurofins TestAmerica, Pensacola
List Creation: 02/27/20 11:52 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	1009984
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.1°C IR 8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

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

Laboratory Job ID: 500-178418-2
Client Project/Site: Powerton CCR

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

Attn: Richard Gnat

Diana Mockler

Authorized for release by:
3/24/2020 10:27:40 AM

Diana Mockler, Project Manager I
(219)252-7570
diana.mockler@testamericainc.com

LINKS

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Job ID: 500-178418-2

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-178418-2

Comments
No additional comments.

Receipt
The samples were received on 2/26/2020 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were -0.9º C and 2.3º C.

RAD
Methods 903.0, 9315: Ra-226 Prep Batch 160-462243
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 (500-178418-1), MW-03 (500-178418-2), MW-04 (500-178418-3), MW-10 (500-178418-4), MW-01 (500-178418-5), MW-05 (500-178418-6), (LCS 160-462243/1-A), (MB 160-462243/23-A) and (500-178418-D-1-A DU)

Methods 904.0, 9320: Radium-228 Prep Batch 160-462246
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 (500-178418-1), MW-03 (500-178418-2), MW-04 (500-178418-3), MW-10 (500-178418-4), MW-01 (500-178418-5), MW-05 (500-178418-6), (LCS 160-462246/1-A), (MB 160-462246/23-A) and (500-178418-D-1-B DU)

Method PrecSep_0: Radium 228 Prep batch 160-462246:
The following samples were prepared at a reduced aliquot due to brown discoloration: MW-10 (500-178418-4).

Method PrecSep-21: Radium 226 Prep batch 160-462243:
The following samples were prepared at a reduced aliquot due to brown discoloration: MW-10 (500-178418-4).

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

Method Summary

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

Job ID: 500-178418-2

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

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

TAL SL = Eurofins TestAmerica, 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

Job ID: 500-178418-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-178418-1	MW-02	Water	02/24/20 11:16	02/26/20 09:30	
500-178418-2	MW-03	Water	02/24/20 12:21	02/26/20 09:30	
500-178418-3	MW-04	Water	02/24/20 13:26	02/26/20 09:30	
500-178418-4	MW-10	Water	02/25/20 09:06	02/26/20 09:30	
500-178418-5	MW-01	Water	02/24/20 15:51	02/26/20 09:30	
500-178418-6	MW-05	Water	02/24/20 14:41	02/26/20 09:30	

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

Job ID: 500-178418-2

Client Sample ID: MW-02
Date Collected: 02/24/20 11:16
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-1
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0806	U	0.0787	0.0791	1.00	0.122	pCi/L	02/28/20 07:32	03/23/20 07:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.8*		*40 - 110*	*02/28/20 07:32*	*03/23/20 07:35*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.404**		0.252	0.255	1.00	0.385	pCi/L	02/28/20 07:57	03/18/20 18:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.8*		*40 - 110*	*02/28/20 07:57*	*03/18/20 18:20*	*1*
Y Carrier	*86.0*		*40 - 110*	*02/28/20 07:57*	*03/18/20 18:20*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.485**		0.264	0.267	5.00	0.385	pCi/L		03/24/20 09:52	1

Client Sample ID: MW-03

Date Collected: 02/24/20 12:21
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-2

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0381	U	0.0642	0.0643	1.00	0.154	pCi/L	02/28/20 07:32	03/23/20 07:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.4*		*40 - 110*	*02/28/20 07:32*	*03/23/20 07:36*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.404**		0.261	0.264	1.00	0.400	pCi/L	02/28/20 07:57	03/18/20 18:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.4*		*40 - 110*	*02/28/20 07:57*	*03/18/20 18:20*	*1*
Y Carrier	*86.4*		*40 - 110*	*02/28/20 07:57*	*03/18/20 18:20*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.366	U	0.269	0.272	5.00	0.400	pCi/L		03/24/20 09:52	1

Client Sample ID: MW-04

Date Collected: 02/24/20 13:26
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-3

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0315	U	0.0697	0.0698	1.00	0.127	pCi/L	02/28/20 07:32	03/23/20 07:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.6*		*40 - 110*	*02/28/20 07:32*	*03/23/20 07:36*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.564**		0.289	0.294	1.00	0.428	pCi/L	02/28/20 07:57	03/18/20 18:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.6*		*40 - 110*	*02/28/20 07:57*	*03/18/20 18:21*	*1*
Y Carrier	*80.0*		*40 - 110*	*02/28/20 07:57*	*03/18/20 18:21*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.595**		0.297	0.302	5.00	0.428	pCi/L		03/24/20 09:52	1

Client Sample ID: MW-10

Date Collected: 02/25/20 09:06
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-4

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.491		0.194	0.199	1.00	0.225	pCi/L	02/28/20 07:32	03/23/20 07:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.7*		*40 - 110*	*02/28/20 07:32*	*03/23/20 07:36*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.576		0.373	0.377	1.00	0.574	pCi/L	02/28/20 07:57	03/18/20 18:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.7*		*40 - 110*	*02/28/20 07:57*	*03/18/20 18:21*	*1*
Y Carrier	*84.9*		*40 - 110*	*02/28/20 07:57*	*03/18/20 18:21*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.07		0.420	0.426	5.00	0.574	pCi/L		03/24/20 09:52	1

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

Job ID: 500-178418-2

Client Sample ID: MW-01

Date Collected: 02/24/20 15:51
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-5

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.107	U	0.102	0.102	1.00	0.157	pCi/L	02/28/20 07:32	03/23/20 07:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.2*		*40 - 110*	*02/28/20 07:32*	*03/23/20 07:36*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.273	U	0.292	0.293	1.00	0.478	pCi/L	02/28/20 07:57	03/18/20 18:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.2*		*40 - 110*	*02/28/20 07:57*	*03/18/20 18:22*	*1*
Y Carrier	*83.0*		*40 - 110*	*02/28/20 07:57*	*03/18/20 18:22*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.380	U	0.309	0.310	5.00	0.478	pCi/L		03/24/20 09:52	1

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

Job ID: 500-178418-2

Client Sample ID: MW-05

Date Collected: 02/24/20 14:41
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-6

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0162	U	0.0727	0.0727	1.00	0.155	pCi/L	02/28/20 07:32	03/23/20 07:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.0*		*40 - 110*	*02/28/20 07:32*	*03/23/20 07:37*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.522**		0.262	0.267	1.00	0.383	pCi/L	02/28/20 07:57	03/18/20 18:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.0*		*40 - 110*	*02/28/20 07:57*	*03/18/20 18:22*	*1*
Y Carrier	*84.1*		*40 - 110*	*02/28/20 07:57*	*03/18/20 18:22*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.506**		0.272	0.277	5.00	0.383	pCi/L		03/24/20 09:52	1

Definitions/Glossary

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

Job ID: 500-178418-2

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.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Rad

Prep Batch: 462243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-178418-1	MW-02	Total/NA	Water	PrecSep-21	
500-178418-2	MW-03	Total/NA	Water	PrecSep-21	
500-178418-3	MW-04	Total/NA	Water	PrecSep-21	
500-178418-4	MW-10	Total/NA	Water	PrecSep-21	
500-178418-5	MW-01	Total/NA	Water	PrecSep-21	
500-178418-6	MW-05	Total/NA	Water	PrecSep-21	
MB 160-462243/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-462243/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-178418-1 DU	MW-02	Total/NA	Water	PrecSep-21	

Prep Batch: 462246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-178418-1	MW-02	Total/NA	Water	PrecSep_0	
500-178418-2	MW-03	Total/NA	Water	PrecSep_0	
500-178418-3	MW-04	Total/NA	Water	PrecSep_0	
500-178418-4	MW-10	Total/NA	Water	PrecSep_0	
500-178418-5	MW-01	Total/NA	Water	PrecSep_0	
500-178418-6	MW-05	Total/NA	Water	PrecSep_0	
MB 160-462246/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-462246/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-178418-1 DU	MW-02	Total/NA	Water	PrecSep_0	

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-462243/23-A
Matrix: Water
Analysis Batch: 465272

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462243

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.009010	U	0.0725	0.0725	1.00	0.145	pCi/L	02/28/20 07:32	03/23/20 09:27	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*40 - 110*	*02/28/20 07:32*	*03/23/20 09:27*	*1*

Lab Sample ID: LCS 160-462243/1-A
Matrix: Water
Analysis Batch: 465272

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462243

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	8.847		0.960	1.00	0.111	pCi/L	78	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*99.1*		*40 - 110*

Lab Sample ID: 500-178418-1 DU
Matrix: Water
Analysis Batch: 465272

Client Sample ID: MW-02
Prep Type: Total/NA
Prep Batch: 462243

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.0806	U		0.04534	U	0.0982	1.00	0.176	pCi/L			0.20	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*86.5*		*40 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-462246/23-A
Matrix: Water
Analysis Batch: 464837

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462246

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5689		0.299	0.303	1.00	0.443	pCi/L	02/28/20 07:57	03/18/20 18:37	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*40 - 110*	*02/28/20 07:57*	*03/18/20 18:37*	*1*
Y Carrier	*84.5*		*40 - 110*	*02/28/20 07:57*	*03/18/20 18:37*	*1*

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

Lab Sample ID: LCS 160-462246/1-A
Matrix: Water
Analysis Batch: 464630

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462246

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.01	7.198		0.883	1.00	0.390	pCi/L	80	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*99.1*		*40 - 110*
Y Carrier	*87.1*		*40 - 110*

Lab Sample ID: 500-178418-1 DU
Matrix: Water
Analysis Batch: 464630

Client Sample ID: MW-02
Prep Type: Total/NA
Prep Batch: 462246

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.404			0.007153	U	0.258	1.00	0.460	pCi/L			0.77	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*86.5*		*40 - 110*
Y Carrier	*84.9*		*40 - 110*

Lab Chronicle

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

Job ID: 500-178418-2

Client Sample ID: MW-02
Date Collected: 02/24/20 11:16
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			462243	02/28/20 07:32	MNH	TAL SL
Total/NA	Analysis	903.0		1	465272	03/23/20 07:35	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			462246	02/28/20 07:57	MNH	TAL SL
Total/NA	Analysis	904.0		1	464630	03/18/20 18:20	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	465430	03/24/20 09:52	SMP	TAL SL

Client Sample ID: MW-03
Date Collected: 02/24/20 12:21
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			462243	02/28/20 07:32	MNH	TAL SL
Total/NA	Analysis	903.0		1	465272	03/23/20 07:36	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			462246	02/28/20 07:57	MNH	TAL SL
Total/NA	Analysis	904.0		1	464630	03/18/20 18:20	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	465430	03/24/20 09:52	SMP	TAL SL

Client Sample ID: MW-04
Date Collected: 02/24/20 13:26
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			462243	02/28/20 07:32	MNH	TAL SL
Total/NA	Analysis	903.0		1	465272	03/23/20 07:36	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			462246	02/28/20 07:57	MNH	TAL SL
Total/NA	Analysis	904.0		1	464630	03/18/20 18:21	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	465430	03/24/20 09:52	SMP	TAL SL

Client Sample ID: MW-10
Date Collected: 02/25/20 09:06
Date Received: 02/26/20 09:30

Lab Sample ID: 500-178418-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			462243	02/28/20 07:32	MNH	TAL SL
Total/NA	Analysis	903.0		1	465272	03/23/20 07:36	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			462246	02/28/20 07:57	MNH	TAL SL
Total/NA	Analysis	904.0		1	464630	03/18/20 18:21	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	465430	03/24/20 09:52	SMP	TAL SL

Lab Chronicle

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

Job ID: 500-178418-2

Client Sample ID: MW-01

Lab Sample ID: 500-178418-5

Date Collected: 02/24/20 15:51

Matrix: Water

Date Received: 02/26/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			462243	02/28/20 07:32	MNH	TAL SL
Total/NA	Analysis	903.0		1	465272	03/23/20 07:36	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			462246	02/28/20 07:57	MNH	TAL SL
Total/NA	Analysis	904.0		1	464630	03/18/20 18:22	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	465430	03/24/20 09:52	SMP	TAL SL

Client Sample ID: MW-05

Lab Sample ID: 500-178418-6

Date Collected: 02/24/20 14:41

Matrix: Water

Date Received: 02/26/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			462243	02/28/20 07:32	MNH	TAL SL
Total/NA	Analysis	903.0		1	465272	03/23/20 07:37	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			462246	02/28/20 07:57	MNH	TAL SL
Total/NA	Analysis	904.0		1	464630	03/18/20 18:22	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	465430	03/24/20 09:52	SMP	TAL SL

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 500-178418-2

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-20

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	004553	11-30-20

TestAmerica Chicago
2417 Bond Street

University Park, IL 60484-3101
phone 708.534.5200 fax 708.534.5211

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Rich Gnat	Site Contact: Mitchel Dolan	Date: 2/25/20	COC No:
KPRG and Associates, Inc.	Tel/Fax: (262) 781-0475	Lab Contact: Eric Lang	Carrier: FedEx	1 of 1 COCs
14665 West Lisbon Road, Suite 1A	Analysis Turnaround Time			Sampler:
Brookfield, WI 53154	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
(262) 781-0475 Phone	TAT if different from Below _____			Walk-in Client:
(262) 781-0478 FAX	☐ 2 weeks			Lab Sampling:
Project Name: Powerton CCR	☐ 1 week			
Site: Powerton Station - Pekin, IL	☐ 2 days			Job / SDG No.: 500-178418
P O # 12313.1	☐ 1 day			

500-178418 COC

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Total Metals	Cl, Fl, SO4, TDS	Radium 226/228	Sample Specific Notes:
1	MW-02 ~~MW-02~~			G	W	5	N	N	x	x	x	
2	-03 ~~MW-03~~			G	W	5	N	N	x	x	x	
3	-04 ~~MW-04~~			G	W	5	N	N	x	x	x	
4	-10 MW-10	2/25	0926	G	W	5	N	N	x	x	x	
5	-01 ~~MW-01~~			G	W	5	N	N	x	x	x	
6	-05 ~~MW-05~~			G	W	5	N	N	x	x	x	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

4 1 4

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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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 & Comments:

-1.9 -0.9
1.3 2.3

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: 1.3 Corr'd: 2.3	Therm ID No.:

Relinquished by: Mitchel Dolan	Company: KPRG	Date/Time: 2/25/1530	Received by: FEDEX	Company:	Date/Time: 2/25/1530
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA	Date/Time: 2/26/20 0930

Form No. CA-C-WI-002, Rev. 4.18, dated 9/5/2018

Chain of Custody Record

387173

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Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager:	Site Contact: M. Athel Dolan	Date: 2/26/20	COC No:
Company Name: KPRG	Tel/Email:	Lab Contact: Eric Lang	Carrier: FEDEX	___ of ___ COCs
Address: 1515 W Lisbon Rd Ste 114	Analysis Turnaround Time			Sampler:
City/State/Zip: Brookfield, WI 53005	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 262-781-0475	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Powerton FAB CCR	☐ 1 week			
Site: Powerton	☐ 2 days			Job / SDG No.: 500-178418
P O #	☐ 1 day			

500-178418 COC

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Total Metals	Cl, Fl, SO4, TDS	Rad 226/228	Sample Specific Notes:
5	MW-01	2/24	1551	G	W	5	N	N	X	X	X	
1	MW-02	2/24	1116									
2	MW-03	2/24	1221									
3	MW-04	2/24	1326									
6	MW-05	2/24	1441									
4	MW-10	2/25	0906									
									4	1	4	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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 & Comments:
Amended FAB CCR COC ; Appendix III and IV Parameters

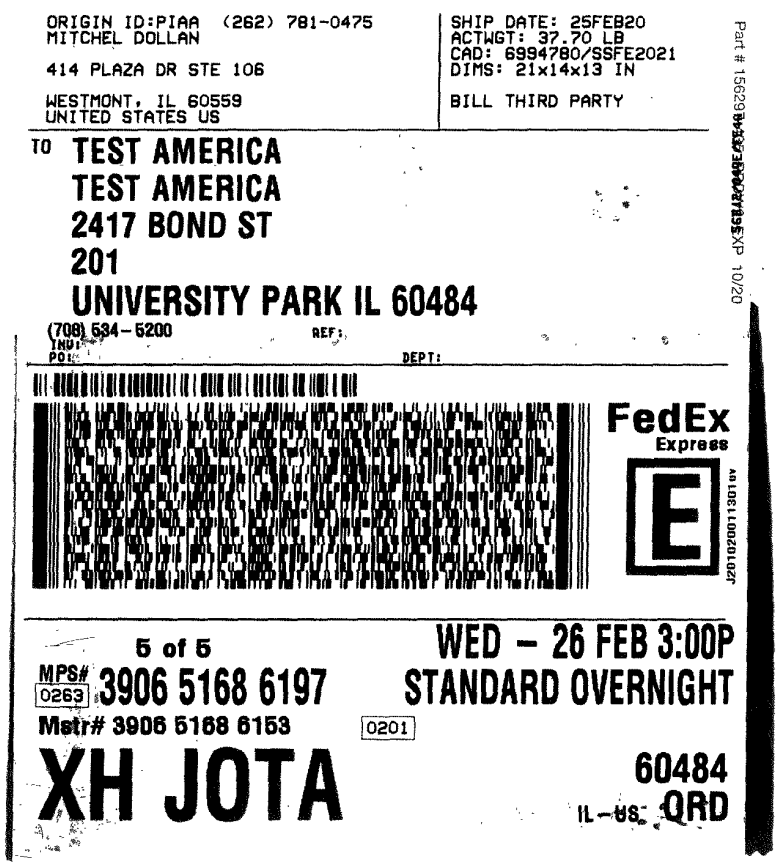
Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
M. Athel Dolan	KPRG	2/26			2/26/20 0950
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:



500-178418 Wayt





ORIGIN ID:PIAA (262) 781-0475
MITCHEL DOLLAN

414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 25FEB20
ACTWGT: 37.70 LB
CAD: 6994780/SSFE2021
DIMS: 21x14x13 IN

BILL THIRD PARTY

TO TEST AMERICA
TEST AMERICA
2417 BOND ST
201
UNIVERSITY PARK IL 60484

(708) 534-6200 REF:
INV:
PO: DEPT:

FedEx Express

5 of 5

WED - 26 FEB 3:00P
STANDARD OVERNIGHT

MPS# 0263 3906 5168 6197
Mstr# 3906 5168 6153 0201

XH JOTA

60484
IL-US ORD

Part # 156291-XXXX XXX XXP 10/20

3 qt.

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lang, Eric A.	Carrier Tracking No(s):	COC No: 500-132449.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eric.lang@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-178418-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/25/2020			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Powerton CCR	Project #: 50011612			
Site: MWG - Powerton	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	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/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-02 (500-178418-1)	2/24/20	11:16 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-03 (500-178418-2)	2/24/20	12:21 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-04 (500-178418-3)	2/24/20	13:26 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-10 (500-178418-4)	2/25/20	09:06 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-01 (500-178418-5)	2/24/20	15:51 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-05 (500-178418-6)	2/24/20	14:41 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs

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

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	2/26/20 1600	[signature]	[signature]	2-27-20 08:55	ETA STL
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-178418-2

Login Number: 178418
List Number: 1
Creator: James, Jeff A

List Source: Eurofins TestAmerica, 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	2.3,-0.9(samples not frozen)
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-178418-2

Login Number: 178418
List Number: 3
Creator: Hellm, Michael

List Source: Eurofins TestAmerica, St. Louis
List Creation: 02/27/20 12:42 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.	N/A	
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	20.0
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?	N/A	
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.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Tracer/Carrier Summary

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

Job ID: 500-178418-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
Lab Sample ID	Client Sample ID	Ba Carrier (40-110)
500-178418-1	MW-02	94.8
500-178418-1 DU	MW-02	86.5
500-178418-2	MW-03	87.4
500-178418-3	MW-04	92.6
500-178418-4	MW-10	87.7
500-178418-5	MW-01	82.2
500-178418-6	MW-05	92.0
LCS 160-462243/1-A	Lab Control Sample	99.1
MB 160-462243/23-A	Method Blank	89.5

Tracer/Carrier Legend

Ba Carrier = 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 Carrier (40-110)	Y Carrier (40-110)
500-178418-1	MW-02	94.8	86.0
500-178418-1 DU	MW-02	86.5	84.9
500-178418-2	MW-03	87.4	86.4
500-178418-3	MW-04	92.6	80.0
500-178418-4	MW-10	87.7	84.9
500-178418-5	MW-01	82.2	83.0
500-178418-6	MW-05	92.0	84.1
LCS 160-462246/1-A	Lab Control Sample	99.1	87.1
MB 160-462246/23-A	Method Blank	89.5	84.5

Tracer/Carrier Legend

Ba Carrier = Ba Carrier

Y Carrier = Y Carrier

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ANALYTICAL REPORT

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

Laboratory Job ID: 500-181249-1
Client Project/Site: Powerton CCR

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

Attn: Richard Gnat

Diana Mockler

Authorized for release by:
5/19/2020 3:10:06 PM

Diana Mockler, Project Manager I
(219)252-7570
diana.mockler@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Case Narrative

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

Job ID: 500-181249-1

Job ID: 500-181249-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-181249-1

Comments
No additional comments.

Receipt
The samples were received on 4/28/2020 9:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 6 coolers at receipt time were 1.6º C, 2.4º C, 2.6º C, 2.8º C, 3.3º C and 5.8º C.

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

General Chemistry
Methods 375.4, SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-18 (500-181249-1), MW-17 (500-181249-2), MW-19 (500-181249-3), (500-180998-C-6), (500-180998-C-6 MS) and (500-180998-C-6 MSD). Elevated reporting limits (RLs) are provided.

Method SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-487586 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method SM 4500 SO4 E: Due to the concentration of sulfates in the parent sample the MS/MSD was diluted after the spike. The spike amount was adjusted by the dilution factor.

(500-180998-C-6 MS) and (500-180998-C-6 MSD)

Method SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 400-487903 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Methods 375.4, SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-01 (500-181249-4), MW-02 (500-181249-5), MW-03 (500-181249-6), MW-04 (500-181249-7), MW-05 (500-181249-8), MW-10 (500-181249-9), MW-08 (500-181249-10), MW-09 (500-181249-11), MW-11 (500-181249-12), MW-12 (500-181249-13), MW-15 (500-181249-14), Duplicate (500-181249-15), (500-181249-A-6 MS) and (500-181249-A-6 MSD). Elevated reporting limits (RLs) are provided.

Method SM 4500 SO4 E: Due to the concentration of sulfates in the parent sample the MS/MSD was diluted after the spike. Then spike amount was adjusted by the dilution factor.
(500-181249-A-6 MS) and (500-181249-A-6 MSD)

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

Detection Summary

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

Job ID: 500-181249-1

Client Sample ID: MW-18 — Lab Sample ID: 500-181249-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.016		0.010		mg/L	1		6010C	Total Recoverable
Barium	0.12		0.0025		mg/L	1		6020A	Total Recoverable
Boron	0.60		0.050		mg/L	1		6020A	Total Recoverable
Calcium	120		0.20		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	1000		10		mg/L	1		SM 2540C	Total/NA
Chloride	170		10		mg/L	5		SM 4500 Cl- E	Total/NA
Fluoride	0.69		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	180		50		mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-17 — Lab Sample ID: 500-181249-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.021		0.010		mg/L	1		6010C	Total Recoverable
Arsenic	0.026		0.0010		mg/L	1		6020A	Total Recoverable
Barium	0.036		0.0025		mg/L	1		6020A	Total Recoverable
Boron	1.2		0.25		mg/L	5		6020A	Total Recoverable
Calcium	150		0.20		mg/L	1		6020A	Total Recoverable
Lead	0.00081		0.00050		mg/L	1		6020A	Total Recoverable
Molybdenum	0.075		0.0050		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	1300		10		mg/L	1		SM 2540C	Total/NA
Chloride	170		10		mg/L	5		SM 4500 Cl- E	Total/NA
Fluoride	0.79		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	520		100		mg/L	20		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-19 — Lab Sample ID: 500-181249-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.077		0.0025		mg/L	1		6020A	Total Recoverable
Boron	2.3		0.25		mg/L	5		6020A	Total Recoverable
Calcium	100		0.20		mg/L	1		6020A	Total Recoverable
Molybdenum	0.042		0.0050		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	570		10		mg/L	1		SM 2540C	Total/NA
Chloride	43		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.17		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	110		25		mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-01 — Lab Sample ID: 500-181249-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.051		0.0025		mg/L	1		6020A	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-01 (Continued) — Lab Sample ID: 500-181249-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.33		0.050		mg/L	1		6020A	Total Recoverable
Calcium	110		0.20		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	470		10		mg/L	1		SM 2540C	Total/NA
Chloride	46		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.19		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	41		10		mg/L	2		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-02 — Lab Sample ID: 500-181249-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0016		0.0010		mg/L	1		6020A	Total Recoverable
Barium	0.060		0.0025		mg/L	1		6020A	Total Recoverable
Boron	0.33		0.050		mg/L	1		6020A	Total Recoverable
Calcium	90		0.20		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	430		10		mg/L	1		SM 2540C	Total/NA
Chloride	50		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.20		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	41		10		mg/L	2		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-03 — Lab Sample ID: 500-181249-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0013		0.0010		mg/L	1		6020A	Total Recoverable
Barium	0.066		0.0025		mg/L	1		6020A	Total Recoverable
Boron	0.24		0.050		mg/L	1		6020A	Total Recoverable
Calcium	86		0.20		mg/L	1		6020A	Total Recoverable
Selenium	0.0036		0.0025		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	410		10		mg/L	1		SM 2540C	Total/NA
Chloride	46		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.22		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	79		25		mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-04 — Lab Sample ID: 500-181249-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.025		0.0025		mg/L	1		6020A	Total Recoverable
Boron	0.55		0.050		mg/L	1		6020A	Total Recoverable
Calcium	76		0.20		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	380		10		mg/L	1		SM 2540C	Total/NA
Chloride	52		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.27		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	47		25		mg/L	5		SM 4500 SO4 E	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 500-181249-1

Client Sample ID: MW-05 — Lab Sample ID: 500-181249-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0010		0.0010		mg/L	1		6020A	Total Recoverable
Barium	0.052		0.0025		mg/L	1		6020A	Total Recoverable
Boron	0.49		0.050		mg/L	1		6020A	Total Recoverable
Calcium	110		0.20		mg/L	1		6020A	Total Recoverable
Molybdenum	0.0074		0.0050		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	620		10		mg/L	1		SM 2540C	Total/NA
Chloride	56		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.37		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	130		25		mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-10 — Lab Sample ID: 500-181249-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0022		0.0010		mg/L	1		6020A	Total Recoverable
Barium	0.25		0.0025		mg/L	1		6020A	Total Recoverable
Boron	1.0		0.050		mg/L	1		6020A	Total Recoverable
Calcium	110		0.20		mg/L	1		6020A	Total Recoverable
Cobalt	0.0065		0.0010		mg/L	1		6020A	Total Recoverable
Lead	0.0017		0.00050		mg/L	1		6020A	Total Recoverable
Selenium	0.0054		0.0025		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	550		10		mg/L	1		SM 2540C	Total/NA
Chloride	41		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.24		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	64		25		mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-08 — Lab Sample ID: 500-181249-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.026		0.010		mg/L	1		6010C	Total Recoverable
Arsenic	0.0026		0.0010		mg/L	1		6020A	Total Recoverable
Barium	0.095		0.0025		mg/L	1		6020A	Total Recoverable
Boron	0.74		0.050		mg/L	1		6020A	Total Recoverable
Calcium	110		0.20		mg/L	1		6020A	Total Recoverable
Molybdenum	0.011		0.0050		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	660		10		mg/L	1		SM 2540C	Total/NA
Chloride	120		10		mg/L	5		SM 4500 Cl- E	Total/NA
Fluoride	0.38		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	58		10		mg/L	2		SM 4500 SO4 E	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 500-181249-1

Client Sample ID: MW-09 — Lab Sample ID: 500-181249-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0012		0.0010		mg/L	1		6020A	Total Recoverable
Barium	0.031		0.0025		mg/L	1		6020A	Total Recoverable
Boron	2.0		0.050		mg/L	1		6020A	Total Recoverable
Calcium	71		0.20		mg/L	1		6020A	Total Recoverable
Molybdenum	0.028		0.0050		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	510		10		mg/L	1		SM 2540C	Total/NA
Chloride	34		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.20		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	140		25		mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-11 — Lab Sample ID: 500-181249-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.019		0.0010		mg/L	1		6020A	Total Recoverable
Barium	0.21		0.0025		mg/L	1		6020A	Total Recoverable
Boron	1.2		0.050		mg/L	1		6020A	Total Recoverable
Calcium	100		0.20		mg/L	1		6020A	Total Recoverable
Cobalt	0.0019		0.0010		mg/L	1		6020A	Total Recoverable
Molybdenum	0.024		0.0050		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	950		10		mg/L	1		SM 2540C	Total/NA
Chloride	110		10		mg/L	5		SM 4500 Cl- E	Total/NA
Fluoride	0.62		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	320		50		mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-12 — Lab Sample ID: 500-181249-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.012		0.010		mg/L	1		6010C	Total Recoverable
Arsenic	0.0029		0.0010		mg/L	1		6020A	Total Recoverable
Barium	0.034		0.0025		mg/L	1		6020A	Total Recoverable
Boron	0.34		0.050		mg/L	1		6020A	Total Recoverable
Calcium	71		0.20		mg/L	1		6020A	Total Recoverable
Molybdenum	0.015		0.0050		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	980		10		mg/L	1		SM 2540C	Total/NA
Chloride	150		10		mg/L	5		SM 4500 Cl- E	Total/NA
Fluoride	0.34		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	360		50		mg/L	10		SM 4500 SO4 E	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 500-181249-1

Client Sample ID: MW-15 — Lab Sample ID: 500-181249-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.027		0.010		mg/L	1		6010C	Total Recoverable
Arsenic	0.0036		0.0010		mg/L	1		6020A	Total Recoverable
Barium	0.060		0.0025		mg/L	1		6020A	Total Recoverable
Boron	1.2		0.050		mg/L	1		6020A	Total Recoverable
Calcium	160		0.20		mg/L	1		6020A	Total Recoverable
Molybdenum	0.023		0.0050		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	1300		10		mg/L	1		SM 2540C	Total/NA
Chloride	200		10		mg/L	5		SM 4500 Cl- E	Total/NA
Fluoride	0.58		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	370		50		mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: Duplicate — Lab Sample ID: 500-181249-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.027		0.010		mg/L	1		6010C	Total Recoverable
Arsenic	0.0027		0.0010		mg/L	1		6020A	Total Recoverable
Barium	0.061		0.0025		mg/L	1		6020A	Total Recoverable
Boron	1.2		0.050		mg/L	1		6020A	Total Recoverable
Calcium	170		0.20		mg/L	1		6020A	Total Recoverable
Molybdenum	0.024		0.0050		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	1300		10		mg/L	1		SM 2540C	Total/NA
Chloride	200		10		mg/L	5		SM 4500 Cl- E	Total/NA
Fluoride	0.56		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	370		50		mg/L	10		SM 4500 SO4 E	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

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

Job ID: 500-181249-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CHI
6020A	Metals (ICP/MS)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
SM 4500 SO4 E	Sulfate, Total	SM	TAL PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI
7470A	Preparation, Mercury	SW846	TAL CHI

Protocol References:

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

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

Laboratory References:

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

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

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

Job ID: 500-181249-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-181249-1	MW-18	Water	04/27/20 10:49	04/28/20 09:35	
500-181249-2	MW-17	Water	04/27/20 11:32	04/28/20 09:35	
500-181249-3	MW-19	Water	04/27/20 12:19	04/28/20 09:35	
500-181249-4	MW-01	Water	04/28/20 08:32	04/29/20 11:30	
500-181249-5	MW-02	Water	04/28/20 09:56	04/29/20 11:30	
500-181249-6	MW-03	Water	04/28/20 10:46	04/29/20 11:30	
500-181249-7	MW-04	Water	04/28/20 11:43	04/29/20 11:30	
500-181249-8	MW-05	Water	04/28/20 12:36	04/29/20 11:30	
500-181249-9	MW-10	Water	04/28/20 13:39	04/29/20 11:30	
500-181249-10	MW-08	Water	04/28/20 14:38	04/29/20 11:30	
500-181249-11	MW-09	Water	04/29/20 09:43	04/30/20 09:40	
500-181249-12	MW-11	Water	04/29/20 08:41	04/30/20 09:40	
500-181249-13	MW-12	Water	04/29/20 10:58	04/30/20 09:40	
500-181249-14	MW-15	Water	04/29/20 12:16	04/30/20 09:40	
500-181249-15	Duplicate	Water	04/29/20 00:00	04/30/20 09:40	

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

Job ID: 500-181249-1

Client Sample ID: MW-18

Date Collected: 04/27/20 10:49
Date Received: 04/28/20 09:35

Lab Sample ID: 500-181249-1

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.016**		0.010		mg/L		04/28/20 17:57	04/29/20 10:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		04/28/20 17:57	04/30/20 11:55	1
Barium	**0.12**		0.0025		mg/L		04/28/20 17:57	04/30/20 11:55	1
Boron	**0.60**		0.050		mg/L		04/28/20 17:57	05/05/20 11:12	1
Cadmium	<0.00050		0.00050		mg/L		04/28/20 17:57	04/30/20 11:55	1
Calcium	**120**		0.20		mg/L		04/28/20 17:57	04/30/20 11:55	1
Cobalt	<0.0010		0.0010		mg/L		04/28/20 17:57	04/30/20 11:55	1
Lead	<0.00050		0.00050		mg/L		04/28/20 17:57	04/30/20 11:55	1
Molybdenum	<0.0050		0.0050		mg/L		04/28/20 17:57	04/30/20 11:55	1
Selenium	<0.0025		0.0025		mg/L		04/28/20 17:57	04/30/20 11:55	1
Thallium	<0.0020		0.0020		mg/L		04/28/20 17:57	04/30/20 11:55	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/04/20 10:40	05/05/20 09:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1000**		10		mg/L			05/01/20 01:49	1
Chloride	**170**		10		mg/L			05/05/20 21:56	5
Fluoride	**0.69**		0.10		mg/L			05/19/20 08:38	1
Sulfate	**180**		50		mg/L			04/30/20 13:01	10

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

Job ID: 500-181249-1

Client Sample ID: MW-17

Date Collected: 04/27/20 11:32
Date Received: 04/28/20 09:35

Lab Sample ID: 500-181249-2

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**0.021**		0.010		mg/L		04/28/20 17:57	04/29/20 10:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.026**		0.0010		mg/L		04/28/20 17:57	04/30/20 11:59	1
Barium	**0.036**		0.0025		mg/L		04/28/20 17:57	04/30/20 11:59	1
Boron	**1.2**		0.25		mg/L		04/28/20 17:57	05/05/20 11:16	5
Cadmium	<0.00050		0.00050		mg/L		04/28/20 17:57	04/30/20 11:59	1
Calcium	**150**		0.20		mg/L		04/28/20 17:57	04/30/20 11:59	1
Cobalt	<0.0010		0.0010		mg/L		04/28/20 17:57	04/30/20 11:59	1
Lead	**0.00081**		0.00050		mg/L		04/28/20 17:57	04/30/20 11:59	1
Molybdenum	**0.075**		0.0050		mg/L		04/28/20 17:57	04/30/20 11:59	1
Selenium	<0.0025		0.0025		mg/L		04/28/20 17:57	04/30/20 11:59	1
Thallium	<0.0020		0.0020		mg/L		04/28/20 17:57	04/30/20 11:59	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/04/20 10:40	05/05/20 09:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1300**		10		mg/L			05/01/20 01:54	1
Chloride	**170**		10		mg/L			05/05/20 21:57	5
Fluoride	**0.79**		0.10		mg/L			05/19/20 08:58	1
Sulfate	**520**		100		mg/L			04/30/20 13:04	20

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

Job ID: 500-181249-1

Client Sample ID: MW-19

Date Collected: 04/27/20 12:19
Date Received: 04/28/20 09:35

Lab Sample ID: 500-181249-3

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		04/28/20 17:57	04/29/20 10:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		04/28/20 17:57	04/30/20 12:03	1
Barium	**0.077**		0.0025		mg/L		04/28/20 17:57	04/30/20 12:03	1
Boron	**2.3**		0.25		mg/L		04/28/20 17:57	05/05/20 11:20	5
Cadmium	<0.00050		0.00050		mg/L		04/28/20 17:57	04/30/20 12:03	1
Calcium	**100**		0.20		mg/L		04/28/20 17:57	04/30/20 12:03	1
Cobalt	<0.0010		0.0010		mg/L		04/28/20 17:57	04/30/20 12:03	1
Lead	<0.00050		0.00050		mg/L		04/28/20 17:57	04/30/20 12:03	1
Molybdenum	**0.042**		0.0050		mg/L		04/28/20 17:57	04/30/20 12:03	1
Selenium	<0.0025		0.0025		mg/L		04/28/20 17:57	04/30/20 12:03	1
Thallium	<0.0020		0.0020		mg/L		04/28/20 17:57	04/30/20 12:03	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/04/20 10:40	05/05/20 09:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**570**		10		mg/L			05/01/20 01:56	1
Chloride	**43**		2.0		mg/L			05/02/20 14:05	1
Fluoride	**0.17**		0.10		mg/L			05/19/20 09:05	1
Sulfate	**110**		25		mg/L			04/30/20 13:04	5

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

Job ID: 500-181249-1

Client Sample ID: MW-01

Date Collected: 04/28/20 08:32
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-4

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		04/29/20 17:08	04/30/20 09:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		04/29/20 17:08	05/04/20 19:19	1
Barium	**0.051**		0.0025		mg/L		04/29/20 17:08	05/04/20 19:19	1
Boron	**0.33**		0.050		mg/L		04/29/20 17:08	05/05/20 11:38	1
Cadmium	<0.00050		0.00050		mg/L		04/29/20 17:08	05/04/20 19:19	1
Calcium	**110**		0.20		mg/L		04/29/20 17:08	05/04/20 19:19	1
Chromium	<0.0050		0.0050		mg/L		04/29/20 17:08	05/04/20 19:19	1
Cobalt	<0.0010		0.0010		mg/L		04/29/20 17:08	05/04/20 19:19	1
Lead	<0.00050		0.00050		mg/L		04/29/20 17:08	05/04/20 19:19	1
Molybdenum	<0.0050		0.0050		mg/L		04/29/20 17:08	05/04/20 19:19	1
Selenium	<0.0025		0.0025		mg/L		04/29/20 17:08	05/04/20 19:19	1
Thallium	<0.0020		0.0020		mg/L		04/29/20 17:08	05/04/20 19:19	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/04/20 10:40	05/05/20 09:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**470**		10		mg/L			05/01/20 01:59	1
Chloride	**46**		2.0		mg/L			05/02/20 14:05	1
Fluoride	**0.19**		0.10		mg/L			05/19/20 09:12	1
Sulfate	**41**		10		mg/L			05/04/20 11:53	2

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

Job ID: 500-181249-1

Client Sample ID: MW-02

Date Collected: 04/28/20 09:56
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0016**		0.0010		mg/L		04/29/20 17:08	05/04/20 19:22	1
Barium	**0.060**		0.0025		mg/L		04/29/20 17:08	05/04/20 19:22	1
Boron	**0.33**		0.050		mg/L		04/29/20 17:08	05/05/20 11:49	1
Calcium	**90**		0.20		mg/L		04/29/20 17:08	05/04/20 19:22	1
Chromium	<0.0050		0.0050		mg/L		04/29/20 17:08	05/04/20 19:22	1
Cobalt	<0.0010		0.0010		mg/L		04/29/20 17:08	05/04/20 19:22	1
Lead	<0.00050		0.00050		mg/L		04/29/20 17:08	05/04/20 19:22	1
Molybdenum	<0.0050		0.0050		mg/L		04/29/20 17:08	05/04/20 19:22	1
Selenium	<0.0025		0.0025		mg/L		04/29/20 17:08	05/04/20 19:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**430**		10		mg/L			05/01/20 02:02	1
Chloride	**50**		2.0		mg/L			05/02/20 14:06	1
Fluoride	**0.20**		0.10		mg/L			05/19/20 09:19	1
Sulfate	**41**		10		mg/L			05/04/20 11:57	2

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

Job ID: 500-181249-1

Client Sample ID: MW-03

Date Collected: 04/28/20 10:46
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0013**		0.0010		mg/L		04/29/20 17:08	05/04/20 19:26	1
Barium	**0.066**		0.0025		mg/L		04/29/20 17:08	05/04/20 19:26	1
Boron	**0.24**		0.050		mg/L		04/29/20 17:08	05/05/20 11:52	1
Calcium	**86**		0.20		mg/L		04/29/20 17:08	05/04/20 19:26	1
Chromium	<0.0050		0.0050		mg/L		04/29/20 17:08	05/04/20 19:26	1
Cobalt	<0.0010		0.0010		mg/L		04/29/20 17:08	05/04/20 19:26	1
Lead	<0.00050		0.00050		mg/L		04/29/20 17:08	05/04/20 19:26	1
Molybdenum	<0.0050		0.0050		mg/L		04/29/20 17:08	05/04/20 19:26	1
Selenium	**0.0036**		0.0025		mg/L		04/29/20 17:08	05/04/20 19:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**410**		10		mg/L			05/01/20 02:04	1
Chloride	**46**		2.0		mg/L			05/02/20 13:03	1
Fluoride	**0.22**		0.10		mg/L			05/19/20 09:25	1
Sulfate	**79**		25		mg/L			05/04/20 11:57	5

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

Job ID: 500-181249-1

Client Sample ID: MW-04

Date Collected: 04/28/20 11:43
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		04/29/20 17:08	05/04/20 19:30	1
Barium	**0.025**		0.0025		mg/L		04/29/20 17:08	05/04/20 19:30	1
Boron	**0.55**		0.050		mg/L		04/29/20 17:08	05/05/20 11:56	1
Calcium	**76**		0.20		mg/L		04/29/20 17:08	05/04/20 19:30	1
Chromium	<0.0050		0.0050		mg/L		04/29/20 17:08	05/04/20 19:30	1
Cobalt	<0.0010		0.0010		mg/L		04/29/20 17:08	05/04/20 19:30	1
Lead	<0.00050		0.00050		mg/L		04/29/20 17:08	05/04/20 19:30	1
Molybdenum	<0.0050		0.0050		mg/L		04/29/20 17:08	05/04/20 19:30	1
Selenium	<0.0025		0.0025		mg/L		04/29/20 17:08	05/04/20 19:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**380**		10		mg/L			05/01/20 02:07	1
Chloride	**52**		2.0		mg/L			05/05/20 19:45	1
Fluoride	**0.27**		0.10		mg/L			05/19/20 09:46	1
Sulfate	**47**		25		mg/L			05/04/20 12:01	5

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

Job ID: 500-181249-1

Client Sample ID: MW-05

Date Collected: 04/28/20 12:36
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0010**		0.0010		mg/L		04/29/20 17:08	05/04/20 19:34	1
Barium	**0.052**		0.0025		mg/L		04/29/20 17:08	05/04/20 19:34	1
Boron	**0.49**		0.050		mg/L		04/29/20 17:08	05/05/20 11:59	1
Calcium	**110**		0.20		mg/L		04/29/20 17:08	05/04/20 19:34	1
Chromium	<0.0050		0.0050		mg/L		04/29/20 17:08	05/04/20 19:34	1
Cobalt	<0.0010		0.0010		mg/L		04/29/20 17:08	05/04/20 19:34	1
Lead	<0.00050		0.00050		mg/L		04/29/20 17:08	05/04/20 19:34	1
Molybdenum	**0.0074**		0.0050		mg/L		04/29/20 17:08	05/04/20 19:34	1
Selenium	<0.0025		0.0025		mg/L		04/29/20 17:08	05/04/20 19:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**620**		10		mg/L			05/01/20 02:09	1
Chloride	**56**		2.0		mg/L			05/05/20 21:58	1
Fluoride	**0.37**		0.10		mg/L			05/19/20 09:53	1
Sulfate	**130**		25		mg/L			05/04/20 12:01	5

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

Job ID: 500-181249-1

Client Sample ID: MW-10

Date Collected: 04/28/20 13:39
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0022**		0.0010		mg/L		04/29/20 17:08	05/04/20 19:37	1
Barium	**0.25**		0.0025		mg/L		04/29/20 17:08	05/04/20 19:37	1
Boron	**1.0**		0.050		mg/L		04/29/20 17:08	05/05/20 12:03	1
Calcium	**110**		0.20		mg/L		04/29/20 17:08	05/04/20 19:37	1
Chromium	<0.0050		0.0050		mg/L		04/29/20 17:08	05/04/20 19:37	1
Cobalt	**0.0065**		0.0010		mg/L		04/29/20 17:08	05/04/20 19:37	1
Lead	**0.0017**		0.00050		mg/L		04/29/20 17:08	05/04/20 19:37	1
Molybdenum	<0.0050		0.0050		mg/L		04/29/20 17:08	05/04/20 19:37	1
Selenium	**0.0054**		0.0025		mg/L		04/29/20 17:08	05/04/20 19:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**550**		10		mg/L			05/01/20 02:12	1
Chloride	**41**		2.0		mg/L			05/05/20 22:01	1
Fluoride	**0.24**		0.10		mg/L			05/19/20 09:59	1
Sulfate	**64**		25		mg/L			05/04/20 12:01	5

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

Job ID: 500-181249-1

Client Sample ID: MW-08

Date Collected: 04/28/20 14:38
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-10

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.026		0.010		mg/L		04/29/20 17:08	04/30/20 09:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0026		0.0010		mg/L		04/29/20 17:08	05/04/20 19:41	1
Barium	0.095		0.0025		mg/L		04/29/20 17:08	05/04/20 19:41	1
Boron	0.74		0.050		mg/L		04/29/20 17:08	05/05/20 12:07	1
Cadmium	<0.00050		0.00050		mg/L		04/29/20 17:08	05/04/20 19:41	1
Calcium	110		0.20		mg/L		04/29/20 17:08	05/04/20 19:41	1
Cobalt	<0.0010		0.0010		mg/L		04/29/20 17:08	05/04/20 19:41	1
Lead	<0.00050		0.00050		mg/L		04/29/20 17:08	05/04/20 19:41	1
Molybdenum	0.011		0.0050		mg/L		04/29/20 17:08	05/04/20 19:41	1
Selenium	<0.0025		0.0025		mg/L		04/29/20 17:08	05/04/20 19:41	1
Thallium	<0.0020		0.0020		mg/L		04/29/20 17:08	05/04/20 19:41	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/05/20 10:05	05/06/20 09:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	660		10		mg/L			05/01/20 02:15	1
Chloride	120		10		mg/L			05/06/20 00:16	5
Fluoride	0.38		0.10		mg/L			05/19/20 10:06	1
Sulfate	58		10		mg/L			05/04/20 12:01	2

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

Job ID: 500-181249-1

Client Sample ID: MW-09

Date Collected: 04/29/20 09:43
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-11

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		05/01/20 07:00	05/01/20 19:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0012**		0.0010		mg/L		05/01/20 07:00	05/01/20 16:36	1
Barium	**0.031**		0.0025		mg/L		05/01/20 07:00	05/01/20 16:36	1
Boron	**2.0**		0.050		mg/L		05/01/20 07:00	05/01/20 16:36	1
Cadmium	<0.00050		0.00050		mg/L		05/01/20 07:00	05/01/20 16:36	1
Calcium	**71**		0.20		mg/L		05/01/20 07:00	05/01/20 16:36	1
Cobalt	<0.0010		0.0010		mg/L		05/01/20 07:00	05/01/20 16:36	1
Lead	<0.00050		0.00050		mg/L		05/01/20 07:00	05/01/20 16:36	1
Molybdenum	**0.028**		0.0050		mg/L		05/01/20 07:00	05/01/20 16:36	1
Selenium	<0.0025		0.0025		mg/L		05/01/20 07:00	05/01/20 16:36	1
Thallium	<0.0020		0.0020		mg/L		05/01/20 07:00	05/01/20 16:36	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/05/20 10:05	05/06/20 09:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**510**		10		mg/L			05/01/20 02:17	1
Chloride	**34**		2.0		mg/L			05/06/20 00:16	1
Fluoride	**0.20**		0.10		mg/L			05/19/20 10:13	1
Sulfate	**140**		25		mg/L			05/04/20 12:06	5

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

Job ID: 500-181249-1

Client Sample ID: MW-11

Date Collected: 04/29/20 08:41
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-12

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		05/01/20 07:00	05/01/20 19:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.019**		0.0010		mg/L		05/01/20 07:00	05/01/20 16:40	1
Barium	**0.21**		0.0025		mg/L		05/01/20 07:00	05/01/20 16:40	1
Boron	**1.2**		0.050		mg/L		05/01/20 07:00	05/01/20 16:40	1
Cadmium	<0.00050		0.00050		mg/L		05/01/20 07:00	05/01/20 16:40	1
Calcium	**100**		0.20		mg/L		05/01/20 07:00	05/01/20 16:40	1
Cobalt	**0.0019**		0.0010		mg/L		05/01/20 07:00	05/01/20 16:40	1
Lead	<0.00050		0.00050		mg/L		05/01/20 07:00	05/01/20 16:40	1
Molybdenum	**0.024**		0.0050		mg/L		05/01/20 07:00	05/01/20 16:40	1
Selenium	<0.0025		0.0025		mg/L		05/01/20 07:00	05/01/20 16:40	1
Thallium	<0.0020		0.0020		mg/L		05/01/20 07:00	05/01/20 16:40	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/05/20 10:05	05/06/20 09:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**950**		10		mg/L			05/01/20 02:20	1
Chloride	**110**		10		mg/L			05/06/20 00:18	5
Fluoride	**0.62**		0.10		mg/L			05/19/20 10:20	1
Sulfate	**320**		50		mg/L			05/04/20 12:06	10

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

Job ID: 500-181249-1

Client Sample ID: MW-12

Date Collected: 04/29/20 10:58
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-13

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.012		0.010		mg/L		05/01/20 07:00	05/01/20 19:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0029		0.0010		mg/L		05/01/20 07:00	05/01/20 16:43	1
Barium	0.034		0.0025		mg/L		05/01/20 07:00	05/01/20 16:43	1
Boron	0.34		0.050		mg/L		05/01/20 07:00	05/01/20 16:43	1
Cadmium	<0.00050		0.00050		mg/L		05/01/20 07:00	05/01/20 16:43	1
Calcium	71		0.20		mg/L		05/01/20 07:00	05/01/20 16:43	1
Cobalt	<0.0010		0.0010		mg/L		05/01/20 07:00	05/01/20 16:43	1
Lead	<0.00050		0.00050		mg/L		05/01/20 07:00	05/01/20 16:43	1
Molybdenum	0.015		0.0050		mg/L		05/01/20 07:00	05/01/20 16:43	1
Selenium	<0.0025		0.0025		mg/L		05/01/20 07:00	05/01/20 16:43	1
Thallium	<0.0020		0.0020		mg/L		05/01/20 07:00	05/01/20 16:43	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/05/20 10:05	05/06/20 09:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	980		10		mg/L			05/01/20 02:22	1
Chloride	150		10		mg/L			05/06/20 00:18	5
Fluoride	0.34		0.10		mg/L			05/19/20 10:27	1
Sulfate	360		50		mg/L			05/04/20 12:23	10

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

Job ID: 500-181249-1

Client Sample ID: MW-15

Date Collected: 04/29/20 12:16
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-14

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.027		0.010		mg/L		05/01/20 07:00	05/01/20 20:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0036		0.0010		mg/L		05/01/20 07:00	05/01/20 16:47	1
Barium	0.060		0.0025		mg/L		05/01/20 07:00	05/01/20 16:47	1
Boron	1.2		0.050		mg/L		05/01/20 07:00	05/01/20 16:47	1
Cadmium	<0.00050		0.00050		mg/L		05/01/20 07:00	05/01/20 16:47	1
Calcium	160		0.20		mg/L		05/01/20 07:00	05/01/20 16:47	1
Cobalt	<0.0010		0.0010		mg/L		05/01/20 07:00	05/01/20 16:47	1
Lead	<0.00050		0.00050		mg/L		05/01/20 07:00	05/01/20 16:47	1
Molybdenum	0.023		0.0050		mg/L		05/01/20 07:00	05/01/20 16:47	1
Selenium	<0.0025		0.0025		mg/L		05/01/20 07:00	05/01/20 16:47	1
Thallium	<0.0020		0.0020		mg/L		05/01/20 07:00	05/01/20 16:47	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/05/20 10:05	05/06/20 09:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1300		10		mg/L			05/01/20 02:25	1
Chloride	200		10		mg/L			05/06/20 00:19	5
Fluoride	0.58		0.10		mg/L			05/19/20 10:33	1
Sulfate	370		50		mg/L			05/04/20 12:23	10

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

Job ID: 500-181249-1

Client Sample ID: Duplicate

Date Collected: 04/29/20 00:00
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-15

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.027		0.010		mg/L		05/01/20 07:00	05/01/20 20:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0027		0.0010		mg/L		05/01/20 07:00	05/01/20 16:51	1
Barium	0.061		0.0025		mg/L		05/01/20 07:00	05/01/20 16:51	1
Boron	1.2		0.050		mg/L		05/01/20 07:00	05/01/20 16:51	1
Cadmium	<0.00050		0.00050		mg/L		05/01/20 07:00	05/01/20 16:51	1
Calcium	170		0.20		mg/L		05/01/20 07:00	05/01/20 16:51	1
Cobalt	<0.0010		0.0010		mg/L		05/01/20 07:00	05/01/20 16:51	1
Lead	<0.00050		0.00050		mg/L		05/01/20 07:00	05/01/20 16:51	1
Molybdenum	0.024		0.0050		mg/L		05/01/20 07:00	05/01/20 16:51	1
Selenium	<0.0025		0.0025		mg/L		05/01/20 07:00	05/01/20 16:51	1
Thallium	<0.0020		0.0020		mg/L		05/01/20 07:00	05/01/20 16:51	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/05/20 10:05	05/06/20 09:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1300		10		mg/L			05/01/20 02:27	1
Chloride	200		10		mg/L			05/06/20 00:19	5
Fluoride	0.56		0.10		mg/L			05/19/20 10:38	1
Sulfate	370		50		mg/L			05/04/20 12:08	10

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.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Metals

Prep Batch: 540154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-1	MW-18	Total Recoverable	Water	3005A	
500-181249-2	MW-17	Total Recoverable	Water	3005A	
500-181249-3	MW-19	Total Recoverable	Water	3005A	
MB 500-540154/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-540154/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 540335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-1	MW-18	Total Recoverable	Water	6010C	540154
500-181249-2	MW-17	Total Recoverable	Water	6010C	540154
500-181249-3	MW-19	Total Recoverable	Water	6010C	540154
MB 500-540154/1-A	Method Blank	Total Recoverable	Water	6010C	540154
LCS 500-540154/2-A	Lab Control Sample	Total Recoverable	Water	6010C	540154

Prep Batch: 540361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-4	MW-01	Total Recoverable	Water	3005A	
500-181249-5	MW-02	Total Recoverable	Water	3005A	
500-181249-6	MW-03	Total Recoverable	Water	3005A	
500-181249-7	MW-04	Total Recoverable	Water	3005A	
500-181249-8	MW-05	Total Recoverable	Water	3005A	
500-181249-9	MW-10	Total Recoverable	Water	3005A	
500-181249-10	MW-08	Total Recoverable	Water	3005A	
MB 500-540361/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-540361/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 540533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-4	MW-01	Total Recoverable	Water	6010C	540361
500-181249-10	MW-08	Total Recoverable	Water	6010C	540361
MB 500-540361/1-A	Method Blank	Total Recoverable	Water	6010C	540361
LCS 500-540361/2-A	Lab Control Sample	Total Recoverable	Water	6010C	540361

Analysis Batch: 540544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-1	MW-18	Total Recoverable	Water	6020A	540154
500-181249-2	MW-17	Total Recoverable	Water	6020A	540154
500-181249-3	MW-19	Total Recoverable	Water	6020A	540154
MB 500-540154/1-A	Method Blank	Total Recoverable	Water	6020A	540154
LCS 500-540154/2-A	Lab Control Sample	Total Recoverable	Water	6020A	540154

Prep Batch: 540624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-11	MW-09	Total Recoverable	Water	3005A	
500-181249-12	MW-11	Total Recoverable	Water	3005A	
500-181249-13	MW-12	Total Recoverable	Water	3005A	
500-181249-14	MW-15	Total Recoverable	Water	3005A	
500-181249-15	Duplicate	Total Recoverable	Water	3005A	
MB 500-540624/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-540624/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Metals

Analysis Batch: 540772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-11	MW-09	Total Recoverable	Water	6010C	540624
500-181249-12	MW-11	Total Recoverable	Water	6010C	540624
500-181249-13	MW-12	Total Recoverable	Water	6010C	540624
500-181249-14	MW-15	Total Recoverable	Water	6010C	540624
500-181249-15	Duplicate	Total Recoverable	Water	6010C	540624
MB 500-540624/1-A	Method Blank	Total Recoverable	Water	6010C	540624
LCS 500-540624/2-A	Lab Control Sample	Total Recoverable	Water	6010C	540624

Analysis Batch: 540865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-11	MW-09	Total Recoverable	Water	6020A	540624
500-181249-12	MW-11	Total Recoverable	Water	6020A	540624
500-181249-13	MW-12	Total Recoverable	Water	6020A	540624
500-181249-14	MW-15	Total Recoverable	Water	6020A	540624
500-181249-15	Duplicate	Total Recoverable	Water	6020A	540624
MB 500-540624/1-A	Method Blank	Total Recoverable	Water	6020A	540624
LCS 500-540624/2-A	Lab Control Sample	Total Recoverable	Water	6020A	540624

Prep Batch: 540885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-1	MW-18	Total/NA	Water	7470A	
500-181249-2	MW-17	Total/NA	Water	7470A	
500-181249-3	MW-19	Total/NA	Water	7470A	
500-181249-4	MW-01	Total/NA	Water	7470A	
MB 500-540885/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-540885/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-181249-1 MS	MW-18	Total/NA	Water	7470A	
500-181249-1 MSD	MW-18	Total/NA	Water	7470A	
500-181249-1 DU	MW-18	Total/NA	Water	7470A	

Analysis Batch: 541048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-4	MW-01	Total Recoverable	Water	6020A	540361
500-181249-5	MW-02	Total Recoverable	Water	6020A	540361
500-181249-6	MW-03	Total Recoverable	Water	6020A	540361
500-181249-7	MW-04	Total Recoverable	Water	6020A	540361
500-181249-8	MW-05	Total Recoverable	Water	6020A	540361
500-181249-9	MW-10	Total Recoverable	Water	6020A	540361
500-181249-10	MW-08	Total Recoverable	Water	6020A	540361
MB 500-540361/1-A	Method Blank	Total Recoverable	Water	6020A	540361
LCS 500-540361/2-A	Lab Control Sample	Total Recoverable	Water	6020A	540361

Prep Batch: 541074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-10	MW-08	Total/NA	Water	7470A	
500-181249-11	MW-09	Total/NA	Water	7470A	
500-181249-12	MW-11	Total/NA	Water	7470A	
500-181249-13	MW-12	Total/NA	Water	7470A	
500-181249-14	MW-15	Total/NA	Water	7470A	
500-181249-15	Duplicate	Total/NA	Water	7470A	
MB 500-541074/12-A	Method Blank	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 541074 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-541074/13-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 541085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-1	MW-18	Total/NA	Water	7470A	540885
500-181249-2	MW-17	Total/NA	Water	7470A	540885
500-181249-3	MW-19	Total/NA	Water	7470A	540885
500-181249-4	MW-01	Total/NA	Water	7470A	540885
MB 500-540885/12-A	Method Blank	Total/NA	Water	7470A	540885
LCS 500-540885/13-A	Lab Control Sample	Total/NA	Water	7470A	540885
500-181249-1 MS	MW-18	Total/NA	Water	7470A	540885
500-181249-1 MSD	MW-18	Total/NA	Water	7470A	540885
500-181249-1 DU	MW-18	Total/NA	Water	7470A	540885

Analysis Batch: 541102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-1	MW-18	Total Recoverable	Water	6020A	540154
500-181249-2	MW-17	Total Recoverable	Water	6020A	540154
500-181249-3	MW-19	Total Recoverable	Water	6020A	540154
500-181249-4	MW-01	Total Recoverable	Water	6020A	540361
500-181249-5	MW-02	Total Recoverable	Water	6020A	540361
500-181249-6	MW-03	Total Recoverable	Water	6020A	540361
500-181249-7	MW-04	Total Recoverable	Water	6020A	540361
500-181249-8	MW-05	Total Recoverable	Water	6020A	540361
500-181249-9	MW-10	Total Recoverable	Water	6020A	540361
500-181249-10	MW-08	Total Recoverable	Water	6020A	540361
MB 500-540154/1-A	Method Blank	Total Recoverable	Water	6020A	540154
MB 500-540361/1-A	Method Blank	Total Recoverable	Water	6020A	540361
LCS 500-540154/2-A	Lab Control Sample	Total Recoverable	Water	6020A	540154
LCS 500-540361/2-A	Lab Control Sample	Total Recoverable	Water	6020A	540361

Analysis Batch: 541287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-10	MW-08	Total/NA	Water	7470A	541074
500-181249-11	MW-09	Total/NA	Water	7470A	541074
500-181249-12	MW-11	Total/NA	Water	7470A	541074
500-181249-13	MW-12	Total/NA	Water	7470A	541074
500-181249-14	MW-15	Total/NA	Water	7470A	541074
500-181249-15	Duplicate	Total/NA	Water	7470A	541074
MB 500-541074/12-A	Method Blank	Total/NA	Water	7470A	541074
LCS 500-541074/13-A	Lab Control Sample	Total/NA	Water	7470A	541074

General Chemistry

Analysis Batch: 487586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-1	MW-18	Total/NA	Water	SM 4500 SO4 E	
500-181249-2	MW-17	Total/NA	Water	SM 4500 SO4 E	
500-181249-3	MW-19	Total/NA	Water	SM 4500 SO4 E	
MB 400-487586/5	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-487586/6	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

General Chemistry (Continued)

Analysis Batch: 487586 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 400-487586/26	Lab Control Sample Dup	Total/NA	Water	SM 4500 SO4 E	
MRL 400-487586/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 487903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-4	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-181249-5	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-181249-6	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-181249-7	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-181249-8	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-181249-9	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-181249-10	MW-08	Total/NA	Water	SM 4500 SO4 E	
500-181249-11	MW-09	Total/NA	Water	SM 4500 SO4 E	
500-181249-12	MW-11	Total/NA	Water	SM 4500 SO4 E	
500-181249-13	MW-12	Total/NA	Water	SM 4500 SO4 E	
500-181249-14	MW-15	Total/NA	Water	SM 4500 SO4 E	
500-181249-15	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 400-487903/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-487903/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-487903/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-181249-6 MS	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-181249-6 MSD	MW-03	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 540620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-1	MW-18	Total/NA	Water	SM 2540C	
500-181249-2	MW-17	Total/NA	Water	SM 2540C	
500-181249-3	MW-19	Total/NA	Water	SM 2540C	
500-181249-4	MW-01	Total/NA	Water	SM 2540C	
500-181249-5	MW-02	Total/NA	Water	SM 2540C	
500-181249-6	MW-03	Total/NA	Water	SM 2540C	
500-181249-7	MW-04	Total/NA	Water	SM 2540C	
500-181249-8	MW-05	Total/NA	Water	SM 2540C	
500-181249-9	MW-10	Total/NA	Water	SM 2540C	
500-181249-10	MW-08	Total/NA	Water	SM 2540C	
500-181249-11	MW-09	Total/NA	Water	SM 2540C	
500-181249-12	MW-11	Total/NA	Water	SM 2540C	
500-181249-13	MW-12	Total/NA	Water	SM 2540C	
500-181249-14	MW-15	Total/NA	Water	SM 2540C	
500-181249-15	Duplicate	Total/NA	Water	SM 2540C	
MB 500-540620/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-540620/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-181249-1 DU	MW-18	Total/NA	Water	SM 2540C	

Analysis Batch: 540788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-6	MW-03	Total/NA	Water	SM 4500 Cl- E	
MB 500-540788/50	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-540788/51	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

General Chemistry

Analysis Batch: 540918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-3	MW-19	Total/NA	Water	SM 4500 Cl- E	
500-181249-4	MW-01	Total/NA	Water	SM 4500 Cl- E	
500-181249-5	MW-02	Total/NA	Water	SM 4500 Cl- E	
MB 500-540918/12	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-540918/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 541151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-7	MW-04	Total/NA	Water	SM 4500 Cl- E	
MB 500-541151/12	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-541151/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 541164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-1	MW-18	Total/NA	Water	SM 4500 Cl- E	
500-181249-2	MW-17	Total/NA	Water	SM 4500 Cl- E	
500-181249-8	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-181249-9	MW-10	Total/NA	Water	SM 4500 Cl- E	
500-181249-10	MW-08	Total/NA	Water	SM 4500 Cl- E	
500-181249-11	MW-09	Total/NA	Water	SM 4500 Cl- E	
500-181249-12	MW-11	Total/NA	Water	SM 4500 Cl- E	
500-181249-13	MW-12	Total/NA	Water	SM 4500 Cl- E	
500-181249-14	MW-15	Total/NA	Water	SM 4500 Cl- E	
500-181249-15	Duplicate	Total/NA	Water	SM 4500 Cl- E	
MB 500-541164/4	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-541164/5	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-181249-8 MS	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-181249-8 MSD	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-181249-11 MS	MW-09	Total/NA	Water	SM 4500 Cl- E	
500-181249-11 MSD	MW-09	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 543368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-1	MW-18	Total/NA	Water	SM 4500 F C	
500-181249-2	MW-17	Total/NA	Water	SM 4500 F C	
500-181249-3	MW-19	Total/NA	Water	SM 4500 F C	
500-181249-4	MW-01	Total/NA	Water	SM 4500 F C	
500-181249-5	MW-02	Total/NA	Water	SM 4500 F C	
500-181249-6	MW-03	Total/NA	Water	SM 4500 F C	
500-181249-7	MW-04	Total/NA	Water	SM 4500 F C	
500-181249-8	MW-05	Total/NA	Water	SM 4500 F C	
500-181249-9	MW-10	Total/NA	Water	SM 4500 F C	
500-181249-10	MW-08	Total/NA	Water	SM 4500 F C	
500-181249-11	MW-09	Total/NA	Water	SM 4500 F C	
500-181249-12	MW-11	Total/NA	Water	SM 4500 F C	
500-181249-13	MW-12	Total/NA	Water	SM 4500 F C	
500-181249-14	MW-15	Total/NA	Water	SM 4500 F C	
500-181249-15	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-543368/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-543368/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-181249-1 MS	MW-18	Total/NA	Water	SM 4500 F C	

General Chemistry (Continued)

Analysis Batch: 543368 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-1 MSD	MW-18	Total/NA	Water	SM 4500 F C	

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-540154/1-A
Matrix: Water
Analysis Batch: 540335

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 540154

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		04/28/20 17:57	04/29/20 10:07	1

Lab Sample ID: LCS 500-540154/2-A
Matrix: Water
Analysis Batch: 540335

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 540154

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.481		mg/L		96	80 - 120

Lab Sample ID: MB 500-540361/1-A
Matrix: Water
Analysis Batch: 540533

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 540361

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		04/29/20 17:08	04/30/20 09:18	1

Lab Sample ID: LCS 500-540361/2-A
Matrix: Water
Analysis Batch: 540533

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 540361

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.516		mg/L		103	80 - 120

Lab Sample ID: MB 500-540624/1-A
Matrix: Water
Analysis Batch: 540772

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 540624

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		05/01/20 07:00	05/01/20 19:31	1

Lab Sample ID: LCS 500-540624/2-A
Matrix: Water
Analysis Batch: 540772

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 540624

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.100	0.107		mg/L		107	80 - 120

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-540154/1-A
Matrix: Water
Analysis Batch: 540544

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 540154

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		04/28/20 17:57	04/30/20 11:48	1
Barium	<0.0025		0.0025		mg/L		04/28/20 17:57	04/30/20 11:48	1
Cadmium	<0.00050		0.00050		mg/L		04/28/20 17:57	04/30/20 11:48	1
Calcium	<0.20		0.20		mg/L		04/28/20 17:57	04/30/20 11:48	1
Cobalt	<0.0010		0.0010		mg/L		04/28/20 17:57	04/30/20 11:48	1
Lead	<0.00050		0.00050		mg/L		04/28/20 17:57	04/30/20 11:48	1

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

Lab Sample ID: MB 500-540154/1-A
Matrix: Water
Analysis Batch: 540544

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 540154

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	<0.0050		0.0050		mg/L		04/28/20 17:57	04/30/20 11:48	1
Selenium	<0.0025		0.0025		mg/L		04/28/20 17:57	04/30/20 11:48	1
Thallium	<0.0020		0.0020		mg/L		04/28/20 17:57	04/30/20 11:48	1

Lab Sample ID: MB 500-540154/1-A
Matrix: Water
Analysis Batch: 541102

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 540154

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		04/28/20 17:57	05/05/20 11:05	1

Lab Sample ID: LCS 500-540154/2-A
Matrix: Water
Analysis Batch: 540544

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 540154

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0995		mg/L		100	80 - 120
Barium	2.00	2.01		mg/L		100	80 - 120
Cadmium	0.0500	0.0512		mg/L		102	80 - 120
Calcium	10.0	10.3		mg/L		103	80 - 120
Cobalt	0.500	0.529		mg/L		106	80 - 120
Lead	0.100	0.110		mg/L		110	80 - 120
Molybdenum	1.00	1.01		mg/L		101	80 - 120
Selenium	0.100	0.103		mg/L		103	80 - 120
Thallium	0.100	0.109		mg/L		109	80 - 120

Lab Sample ID: LCS 500-540154/2-A
Matrix: Water
Analysis Batch: 541102

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 540154

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	1.00		mg/L		100	80 - 120

Lab Sample ID: MB 500-540361/1-A
Matrix: Water
Analysis Batch: 541048

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 540361

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		04/29/20 17:08	05/04/20 18:34	1
Barium	<0.0025		0.0025		mg/L		04/29/20 17:08	05/04/20 18:34	1
Cadmium	<0.00050		0.00050		mg/L		04/29/20 17:08	05/04/20 18:34	1
Calcium	<0.20		0.20		mg/L		04/29/20 17:08	05/04/20 18:34	1
Chromium	<0.0050		0.0050		mg/L		04/29/20 17:08	05/04/20 18:34	1
Cobalt	<0.0010		0.0010		mg/L		04/29/20 17:08	05/04/20 18:34	1
Lead	<0.00050		0.00050		mg/L		04/29/20 17:08	05/04/20 18:34	1
Molybdenum	<0.0050		0.0050		mg/L		04/29/20 17:08	05/04/20 18:34	1
Selenium	<0.0025		0.0025		mg/L		04/29/20 17:08	05/04/20 18:34	1
Thallium	<0.0020		0.0020		mg/L		04/29/20 17:08	05/04/20 18:34	1

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

Lab Sample ID: MB 500-540361/1-A
Matrix: Water
Analysis Batch: 541102

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 540361

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		04/29/20 17:08	05/05/20 11:23	1

Lab Sample ID: LCS 500-540361/2-A
Matrix: Water
Analysis Batch: 541048

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 540361

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0954		mg/L		95	80 - 120
Barium	2.00	1.93		mg/L		96	80 - 120
Cadmium	0.0500	0.0472		mg/L		94	80 - 120
Calcium	10.0	10.0		mg/L		100	80 - 120
Chromium	0.200	0.198		mg/L		99	80 - 120
Cobalt	0.500	0.494		mg/L		99	80 - 120
Lead	0.100	0.104		mg/L		104	80 - 120
Molybdenum	1.00	0.951		mg/L		95	80 - 120
Selenium	0.100	0.100		mg/L		100	80 - 120
Thallium	0.100	0.105		mg/L		105	80 - 120

Lab Sample ID: LCS 500-540361/2-A
Matrix: Water
Analysis Batch: 541102

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 540361

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	0.992		mg/L		99	80 - 120

Lab Sample ID: MB 500-540624/1-A
Matrix: Water
Analysis Batch: 540865

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 540624

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		05/01/20 07:00	05/01/20 16:28	1
Barium	<0.0025		0.0025		mg/L		05/01/20 07:00	05/01/20 16:28	1
Boron	<0.050		0.050		mg/L		05/01/20 07:00	05/01/20 16:28	1
Cadmium	<0.00050		0.00050		mg/L		05/01/20 07:00	05/01/20 16:28	1
Calcium	<0.20		0.20		mg/L		05/01/20 07:00	05/01/20 16:28	1
Cobalt	<0.0010		0.0010		mg/L		05/01/20 07:00	05/01/20 16:28	1
Lead	<0.00050		0.00050		mg/L		05/01/20 07:00	05/01/20 16:28	1
Molybdenum	<0.0050		0.0050		mg/L		05/01/20 07:00	05/01/20 16:28	1
Selenium	<0.0025		0.0025		mg/L		05/01/20 07:00	05/01/20 16:28	1
Thallium	<0.0020		0.0020		mg/L		05/01/20 07:00	05/01/20 16:28	1

Lab Sample ID: LCS 500-540624/2-A
Matrix: Water
Analysis Batch: 540865

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 540624

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0943		mg/L		94	80 - 120
Barium	0.500	0.505		mg/L		101	80 - 120
Boron	1.00	0.932		mg/L		93	80 - 120

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

Lab Sample ID: LCS 500-540624/2-A
Matrix: Water
Analysis Batch: 540865

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 540624

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.0500	0.0481		mg/L		96	80 - 120
Calcium	10.0	10.2		mg/L		102	80 - 120
Cobalt	0.500	0.484		mg/L		97	80 - 120
Lead	0.100	0.106		mg/L		106	80 - 120
Molybdenum	1.00	0.960		mg/L		96	80 - 120
Selenium	0.100	0.0980		mg/L		98	80 - 120
Thallium	0.100	0.102		mg/L		102	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-540885/12-A
Matrix: Water
Analysis Batch: 541085

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540885

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/04/20 10:40	05/05/20 08:49	1

Lab Sample ID: LCS 500-540885/13-A
Matrix: Water
Analysis Batch: 541085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540885

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00199		mg/L		99	80 - 120

Lab Sample ID: 500-181249-1 MS
Matrix: Water
Analysis Batch: 541085

Client Sample ID: MW-18
Prep Type: Total/NA
Prep Batch: 540885

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.00020		0.00100	0.00113		mg/L		113	75 - 125

Lab Sample ID: 500-181249-1 MSD
Matrix: Water
Analysis Batch: 541085

Client Sample ID: MW-18
Prep Type: Total/NA
Prep Batch: 540885

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00020		0.00100	0.00113		mg/L		113	75 - 125	0	20

Lab Sample ID: 500-181249-1 DU
Matrix: Water
Analysis Batch: 541085

Client Sample ID: MW-18
Prep Type: Total/NA
Prep Batch: 540885

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

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

Lab Sample ID: MB 500-541074/12-A
Matrix: Water
Analysis Batch: 541287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541074

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/05/20 10:05	05/06/20 08:45	1

Lab Sample ID: LCS 500-541074/13-A
Matrix: Water
Analysis Batch: 541287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541074

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00197		mg/L		98	80 - 120

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

Lab Sample ID: MB 500-540620/1
Matrix: Water
Analysis Batch: 540620

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			05/01/20 01:44	1

Lab Sample ID: LCS 500-540620/2
Matrix: Water
Analysis Batch: 540620

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	250	266		mg/L		106	80 - 120

Lab Sample ID: 500-181249-1 DU
Matrix: Water
Analysis Batch: 540620

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1000		1010		mg/L		0.6	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-540788/50
Matrix: Water
Analysis Batch: 540788

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			05/02/20 12:42	1

Lab Sample ID: LCS 500-540788/51
Matrix: Water
Analysis Batch: 540788

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	52.5		mg/L		105	85 - 115

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

Lab Sample ID: MB 500-540918/12
Matrix: Water
Analysis Batch: 540918

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			05/02/20 13:46	1

Lab Sample ID: LCS 500-540918/13
Matrix: Water
Analysis Batch: 540918

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	53.8		mg/L		108	85 - 115

Lab Sample ID: MB 500-541151/12
Matrix: Water
Analysis Batch: 541151

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			05/05/20 19:23	1

Lab Sample ID: LCS 500-541151/13
Matrix: Water
Analysis Batch: 541151

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	51.6		mg/L		103	85 - 115

Lab Sample ID: MB 500-541164/4
Matrix: Water
Analysis Batch: 541164

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			05/05/20 21:54	1

Lab Sample ID: LCS 500-541164/5
Matrix: Water
Analysis Batch: 541164

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	52.7		mg/L		105	85 - 115

Lab Sample ID: 500-181249-8 MS
Matrix: Water
Analysis Batch: 541164

Client Sample ID: MW-05
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	56		50.0	104		mg/L		94	75 - 125

Lab Sample ID: 500-181249-8 MSD
Matrix: Water
Analysis Batch: 541164

Client Sample ID: MW-05
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	56		50.0	105		mg/L		98	75 - 125	2	20

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: 500-181249-11 MS
Matrix: Water
Analysis Batch: 541164

Client Sample ID: MW-09
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	34		50.0	85.8		mg/L		103	75 - 125

Lab Sample ID: 500-181249-11 MSD
Matrix: Water
Analysis Batch: 541164

Client Sample ID: MW-09
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		50.0	83.7		mg/L		98	75 - 125	3	20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-543368/3
Matrix: Water
Analysis Batch: 543368

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			05/19/20 08:29	1

Lab Sample ID: LCS 500-543368/4
Matrix: Water
Analysis Batch: 543368

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	11.0		mg/L		110	80 - 120

Lab Sample ID: 500-181249-1 MS
Matrix: Water
Analysis Batch: 543368

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.69		5.00	6.14		mg/L		109	75 - 125

Lab Sample ID: 500-181249-1 MSD
Matrix: Water
Analysis Batch: 543368

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.69		5.00	6.14		mg/L		109	75 - 125	0	20

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-487586/5
Matrix: Water
Analysis Batch: 487586

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			04/30/20 12:12	1

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

Lab Sample ID: LCS 400-487586/6
Matrix: Water
Analysis Batch: 487586

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	14.7		mg/L		98	90 - 110

Lab Sample ID: MRL 400-487586/3
Matrix: Water
Analysis Batch: 487586

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	<5.0		mg/L		97	50 - 150

Lab Sample ID: MB 400-487903/6
Matrix: Water
Analysis Batch: 487903

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			05/04/20 11:20	1

Lab Sample ID: LCS 400-487903/7
Matrix: Water
Analysis Batch: 487903

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	15.0		mg/L		100	90 - 110

Lab Sample ID: MRL 400-487903/3
Matrix: Water
Analysis Batch: 487903

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	5.89		mg/L		118	50 - 150

Lab Sample ID: 500-181249-6 MS
Matrix: Water
Analysis Batch: 487903

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	79		10.0	86.4	4	mg/L		74	77 - 128

Lab Sample ID: 500-181249-6 MSD
Matrix: Water
Analysis Batch: 487903

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	79		10.0	83.2	4	mg/L		42	77 - 128	4	5

Lab Chronicle

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

Job ID: 500-181249-1

Client Sample ID: MW-18

Date Collected: 04/27/20 10:49
Date Received: 04/28/20 09:35

Lab Sample ID: 500-181249-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540154	04/28/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	540335	04/29/20 10:20	JEF	TAL CHI
Total Recoverable	Prep	3005A			540154	04/28/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	540544	04/30/20 11:55	FXG	TAL CHI
Total Recoverable	Prep	3005A			540154	04/28/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	541102	05/05/20 11:12	FXG	TAL CHI
Total/NA	Prep	7470A			540885	05/04/20 10:40	MJG	TAL CHI
Total/NA	Analysis	7470A		1	541085	05/05/20 09:18	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	540620	05/01/20 01:49	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	541164	05/05/20 21:56	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	543368	05/19/20 08:38	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	487586	04/30/20 13:01	HES	TAL PEN

Client Sample ID: MW-17

Date Collected: 04/27/20 11:32
Date Received: 04/28/20 09:35

Lab Sample ID: 500-181249-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540154	04/28/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	540335	04/29/20 10:24	JEF	TAL CHI
Total Recoverable	Prep	3005A			540154	04/28/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	540544	04/30/20 11:59	FXG	TAL CHI
Total Recoverable	Prep	3005A			540154	04/28/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		5	541102	05/05/20 11:16	FXG	TAL CHI
Total/NA	Prep	7470A			540885	05/04/20 10:40	MJG	TAL CHI
Total/NA	Analysis	7470A		1	541085	05/05/20 09:24	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	540620	05/01/20 01:54	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	541164	05/05/20 21:57	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	543368	05/19/20 08:58	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	487586	04/30/20 13:04	HES	TAL PEN

Client Sample ID: MW-19

Date Collected: 04/27/20 12:19
Date Received: 04/28/20 09:35

Lab Sample ID: 500-181249-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540154	04/28/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	540335	04/29/20 10:29	JEF	TAL CHI
Total Recoverable	Prep	3005A			540154	04/28/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	540544	04/30/20 12:03	FXG	TAL CHI
Total Recoverable	Prep	3005A			540154	04/28/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		5	541102	05/05/20 11:20	FXG	TAL CHI
Total/NA	Prep	7470A			540885	05/04/20 10:40	MJG	TAL CHI
Total/NA	Analysis	7470A		1	541085	05/05/20 09:26	MJG	TAL CHI

Client Sample ID: MW-19
Lab Sample ID: 500-181249-3
Date Collected: 04/27/20 12:19
Matrix: Water
Date Received: 04/28/20 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	540620	05/01/20 01:56	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	540918	05/02/20 14:05	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	543368	05/19/20 09:05	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	487586	04/30/20 13:04	HES	TAL PEN

Client Sample ID: MW-01
Lab Sample ID: 500-181249-4
Date Collected: 04/28/20 08:32
Matrix: Water
Date Received: 04/29/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540361	04/29/20 17:08	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	540533	04/30/20 09:27	JEF	TAL CHI
Total Recoverable	Prep	3005A			540361	04/29/20 17:08	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	541048	05/04/20 19:19	FXG	TAL CHI
Total Recoverable	Prep	3005A			540361	04/29/20 17:08	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	541102	05/05/20 11:38	FXG	TAL CHI
Total/NA	Prep	7470A			540885	05/04/20 10:40	MJG	TAL CHI
Total/NA	Analysis	7470A		1	541085	05/05/20 09:32	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	540620	05/01/20 01:59	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	540918	05/02/20 14:05	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	543368	05/19/20 09:12	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	487903	05/04/20 11:53	HES	TAL PEN

Client Sample ID: MW-02
Lab Sample ID: 500-181249-5
Date Collected: 04/28/20 09:56
Matrix: Water
Date Received: 04/29/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540361	04/29/20 17:08	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	541048	05/04/20 19:22	FXG	TAL CHI
Total Recoverable	Prep	3005A			540361	04/29/20 17:08	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	541102	05/05/20 11:49	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	540620	05/01/20 02:02	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	540918	05/02/20 14:06	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	543368	05/19/20 09:19	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	487903	05/04/20 11:57	HES	TAL PEN

Client Sample ID: MW-03
Lab Sample ID: 500-181249-6
Date Collected: 04/28/20 10:46
Matrix: Water
Date Received: 04/29/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540361	04/29/20 17:08	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	541048	05/04/20 19:26	FXG	TAL CHI

Lab Chronicle

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

Job ID: 500-181249-1

Client Sample ID: MW-03

Lab Sample ID: 500-181249-6

Date Collected: 04/28/20 10:46

Matrix: Water

Date Received: 04/29/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540361	04/29/20 17:08	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	541102	05/05/20 11:52	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	540620	05/01/20 02:04	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	540788	05/02/20 13:03	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	543368	05/19/20 09:25	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	487903	05/04/20 11:57	HES	TAL PEN

Client Sample ID: MW-04

Lab Sample ID: 500-181249-7

Date Collected: 04/28/20 11:43

Matrix: Water

Date Received: 04/29/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540361	04/29/20 17:08	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	541048	05/04/20 19:30	FXG	TAL CHI
Total Recoverable	Prep	3005A			540361	04/29/20 17:08	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	541102	05/05/20 11:56	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	540620	05/01/20 02:07	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	541151	05/05/20 19:45	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	543368	05/19/20 09:46	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	487903	05/04/20 12:01	HES	TAL PEN

Client Sample ID: MW-05

Lab Sample ID: 500-181249-8

Date Collected: 04/28/20 12:36

Matrix: Water

Date Received: 04/29/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540361	04/29/20 17:08	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	541048	05/04/20 19:34	FXG	TAL CHI
Total Recoverable	Prep	3005A			540361	04/29/20 17:08	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	541102	05/05/20 11:59	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	540620	05/01/20 02:09	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	541164	05/05/20 21:58	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	543368	05/19/20 09:53	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	487903	05/04/20 12:01	HES	TAL PEN

Client Sample ID: MW-10

Lab Sample ID: 500-181249-9

Date Collected: 04/28/20 13:39

Matrix: Water

Date Received: 04/29/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540361	04/29/20 17:08	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	541048	05/04/20 19:37	FXG	TAL CHI
Total Recoverable	Prep	3005A			540361	04/29/20 17:08	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	541102	05/05/20 12:03	FXG	TAL CHI

Lab Chronicle

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

Job ID: 500-181249-1

Client Sample ID: MW-10

Date Collected: 04/28/20 13:39
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	540620	05/01/20 02:12	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	541164	05/05/20 22:01	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	543368	05/19/20 09:59	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	487903	05/04/20 12:01	HES	TAL PEN

Client Sample ID: MW-08

Date Collected: 04/28/20 14:38
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540361	04/29/20 17:08	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	540533	04/30/20 09:31	JEF	TAL CHI
Total Recoverable	Prep	3005A			540361	04/29/20 17:08	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	541048	05/04/20 19:41	FXG	TAL CHI
Total Recoverable	Prep	3005A			540361	04/29/20 17:08	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	541102	05/05/20 12:07	FXG	TAL CHI
Total/NA	Prep	7470A			541074	05/05/20 10:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	541287	05/06/20 09:12	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	540620	05/01/20 02:15	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	541164	05/06/20 00:16	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	543368	05/19/20 10:06	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	487903	05/04/20 12:01	HES	TAL PEN

Client Sample ID: MW-09

Date Collected: 04/29/20 09:43
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540624	05/01/20 07:00	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	540772	05/01/20 19:39	EEN	TAL CHI
Total Recoverable	Prep	3005A			540624	05/01/20 07:00	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	540865	05/01/20 16:36	FXG	TAL CHI
Total/NA	Prep	7470A			541074	05/05/20 10:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	541287	05/06/20 09:18	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	540620	05/01/20 02:17	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	541164	05/06/20 00:16	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	543368	05/19/20 10:13	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	487903	05/04/20 12:06	HES	TAL PEN

Lab Chronicle

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

Job ID: 500-181249-1

Client Sample ID: MW-11

Date Collected: 04/29/20 08:41
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540624	05/01/20 07:00	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	540772	05/01/20 19:43	EEN	TAL CHI
Total Recoverable	Prep	3005A			540624	05/01/20 07:00	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	540865	05/01/20 16:40	FXG	TAL CHI
Total/NA	Prep	7470A			541074	05/05/20 10:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	541287	05/06/20 09:20	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	540620	05/01/20 02:20	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	541164	05/06/20 00:18	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	543368	05/19/20 10:20	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	487903	05/04/20 12:06	HES	TAL PEN

Client Sample ID: MW-12

Date Collected: 04/29/20 10:58
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540624	05/01/20 07:00	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	540772	05/01/20 19:47	EEN	TAL CHI
Total Recoverable	Prep	3005A			540624	05/01/20 07:00	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	540865	05/01/20 16:43	FXG	TAL CHI
Total/NA	Prep	7470A			541074	05/05/20 10:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	541287	05/06/20 09:21	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	540620	05/01/20 02:22	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	541164	05/06/20 00:18	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	543368	05/19/20 10:27	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	487903	05/04/20 12:23	HES	TAL PEN

Client Sample ID: MW-15

Date Collected: 04/29/20 12:16
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540624	05/01/20 07:00	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	540772	05/01/20 20:00	EEN	TAL CHI
Total Recoverable	Prep	3005A			540624	05/01/20 07:00	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	540865	05/01/20 16:47	FXG	TAL CHI
Total/NA	Prep	7470A			541074	05/05/20 10:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	541287	05/06/20 09:23	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	540620	05/01/20 02:25	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	541164	05/06/20 00:19	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	543368	05/19/20 10:33	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	487903	05/04/20 12:23	HES	TAL PEN

Lab Chronicle

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

Job ID: 500-181249-1

Client Sample ID: Duplicate

Date Collected: 04/29/20 00:00
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			540624	05/01/20 07:00	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	540772	05/01/20 20:04	EEN	TAL CHI
Total Recoverable	Prep	3005A			540624	05/01/20 07:00	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	540865	05/01/20 16:51	FXG	TAL CHI
Total/NA	Prep	7470A			541074	05/05/20 10:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	541287	05/06/20 09:24	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	540620	05/01/20 02:27	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	541164	05/06/20 00:19	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	543368	05/19/20 10:38	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	487903	05/04/20 12:08	HES	TAL PEN

Laboratory References:

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

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Accreditation/Certification Summary

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

Job ID: 500-181249-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-20 *

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 60
Phone: 708.534.5200 Fax: 708.53

500-181249 COC

(optional)

Report To
Contact:
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)

Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-181249

Chain of Custody Number:

Page 1 of 1

Temperature °C of Cooler: 0.6→4.6

Client: KPRG
Client Project #: 12313.1
Project Name: Powerton CCR
Project Location/State: Pekin, IL
Lab Project #: 50011612
Sampler: M. Mitchel Dolan
Lab PM: Diana Mozkler

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	8	8	8					Comments
							Parameter	4030, 904.0	6010C, 6020A, D7284	[redacted]	Total Cl, Fl, TDS	Sulfate					
1		MW-18	4/27	1049	6	W		X	X		X	X					
2		MW-17	4/27	1132	6	W		X	X		X	X					
3		MW-19	4/27	1219	6	W		X	X		X	X					

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Mitchel Dolan	KPRG	4/27/20	1630	FEDEX		4/27/20	1630
				Rhondeott	TA-CHI	4/28/20	0935

Lab Courier
Shipped Fed Ex
Hand Delivered

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500-1209L

5/19/2020

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

Chain of Custody Record

eurofins | Environment Testing America

500-181249 COC

Client Information	Sampler: Mitchel Dolan	Lab PM: Mockler, Diana J	Car	COC No: 500-80728-36997.1
Client Contact: Mitchel Dolan	Phone: 262-622-1143	E-Mail: diana.mockler@testamericainc.com		Page: Page 1 of 1
Company: KPRG and Associates, Inc.				Job #: 500-181249
Address: 14665 West Lisbon Road, Suite 1A	Due Date Requested:			
City: Brookfield	TAT Requested (days):			
State, Zip: WI, 53005				
Phone: 309-477-5240(Tel)	PO #: 4501908159			
Email: mitcheld@kprginc.com	WO #:			
Project Name: Powerton CCR Event Desc: Quarterly Powerton CCR Samplling	Project #: 50011612			
Site: Illinois	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)	903.0, 904.0	6010C, 6020A, 7470A	2540C, 4500_F_C, SM4500_Cl_E, SM4500_SO4_E	SM4500_SO4_E - Local Method	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N		
MW-01	4/28/20	0832	G	Water			X	X	X	X		
MW-02		0956		Water								
MW-03		1046		Water								
MW-04		1143		Water								
MW-05		1236		Water								
MW-10		1339		Water								
				Water								

Preservation Codes:

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

Other:

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: Powerton FAB App IV Parameters

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

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		4/28/20 / 1600	KPRG	FEDEX	4/28/20 / 1600	
2					4/29/20 1130	TA-CHI
3					1130	

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 5.8 33

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

(optional)
Report To
Contact:
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-181249

Chain of Custody Number:

Page 1 of 1

Temperature °C of Cooler:

Client: KPRG
Client Project #: 12313.1
Project Name: Powerton CCR
Project Location/State: Pekin, IL
Lab Project #: 500-11612
Sampler: Mitchel Dolan
Lab PM: Diana Mockler

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	8	8	3	3						Comments
							Parameter	Total TDS, Cl, Fl, SO4	Total Sulfate	Total Metals	Rad 226/228						
4		MW-01	4/28	0832	6	W		X	X	X	X						
10		MW-08	4/28	1438	6	W		X	X	X	X						

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	KPRG	4/28/20	1600	FEDEX		4/28/20	1600
				[signature]	TA-CHI	4/29/20	1130

Lab Courier
Shipped FXG
Hand Delivered

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments
Powerton ABB/ASB App. IV Parameters.
*One set of CCR samples collected for MW-01. Well falls under both ABB/ASB + FAB

Lab Comments:

TAL-4124-500 (1209)

5/19/2020

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Mitchel Dolan	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-80729-36998.1
Client Contact: Mitchel Dolan	Phone: 262-622-1143	E-Mail: diana.mockler@testamericainc.com		Page: Page 1 of 1
Company: KPRG and Associates, Inc.				Job #: 500-181249

Address: 14665 West Lisbon Road, Suite 1A	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Brookfield	TAT Requested (days):		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, Z - other (specify)
State, Zip: WI, 53005			
Phone: 309-477-5240(Tel)	PO #: 4501908159		
Email: mitcheld@kprginc.com	WO #:		Other:
Project Name: Powerton CCR Event Desc: Quarterly Powerton CCR Samplling	Project #: 50011612		
Site: Illinois	SSOW#:		

500-181249 COC

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, 904.0	6010C, 6020A, 7470A	2540C, 4500_F_C, SM4500_Cl_E, SM4500_SO4_E	SM4500_SO4_E - Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N		
11 MW-09	4/29/20	0943	G	Water			X	X	X	X		
12 MW-11	4/29/20	0841	G	Water			X	X	X	X		
13 MW-12	4/29/20	1058	G	Water			X	X	X	X		
14 MW-15	4/29/20	1216	G	Water			X	X	X	X		
15 DUPLICATE	4/29/20	-	G	Water			X	X	X	X		
MW-05				Water								
MW-07				Water								
MW-08				Water								
MW-10				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:	Date/Time:	Company	Received by	Date/Time:	Company
Mitchel Dolan	4/29/20 1500	KPRG	FEDEX	4/29/20 1500	
Relinquished by:	Date/Time:	Company	Received by: Shari Knott	Date/Time: 4/30/20 0940	Company TA-CHI
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∧ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.6→2.6, 2.4, 1.8→2.8


ORIGIN ID:PIAA (262) 622-1143
MITCHELL DOLAN
KPRG
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US
SHIP DATE: 27APR20
ACTWGT: 41.05 LB
CAD: 6994780/SSFE2102
DIMS: 24x13x14 IN
BILL THIRD PARTY
TO EUROFINS TEST AMERICA
EUROFINS TEST AMERICA
2417 BOND ST
UNIVERSITY PARK IL 6048
500-181249 Wayb
(000) 000-0000
REF:
INV:
PO:
DEPT:
FedEx
Express
2 of 3
MPS# 0263 3922 9282 8776
Mstr# 3922 9282 8765
0201
TUE - 28 APR 3:00P
STANDARD OVERNIGHT
XH JOTA
60484
IL-US ORD
RT 519
ST 33
5
15:00
A
8776
04.28


ORIGIN ID:PIAA (262) 622-1143
MITCHELL DOLAN
KPRG
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US
SHIP DATE: 29APR20
ACTWGT: 47.45 LB
CAD: 6994780/SSFE2102
DIMS: 25x14x13 IN
BILL THIRD PARTY
TO EUROFINS TEST AMERICA
EUROFINS TEST AMERICA
2417 BOND ST
UNIVERSITY PARK IL 60484
(000) 000-0000
REF:
INV:
PO:
DEPT:
500-181249 Wayt
FedEx
Express
1 of 4
TRK# 0201 3923 6795 1735
THU - 30 APR 3:00P
STANDARD OVERNIGHT
MASTER
XH JOTA
AHS
60484
IL-US ORD
48qt.


ORIGIN ID:PIAA (262) 622-1143
MITCHELL DOLAN
KPRG
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US
SHIP DATE: 29APR20
ACTWGT: 46.80 LB
CAD: 6994780/SSFE2102
DIMS: 25x14x13 IN
BILL THIRD PARTY
TO EUROFINS TEST AMERICA
EUROFINS TEST AMERICA
2417 BOND ST
UNIVERSITY PARK IL 60484
(000) 000-0000
REF:
INV:
PO:
DEPT:
FedEx
Express
3 of 4
MPS# 3923 6795 1757
Mstr# 3923 6795 1735
0263
0201
THU - 30 APR 3:00P
STANDARD OVERNIGHT
AHS
60484
IL-US ORD
XH JOTA
48qt.


ORIGIN ID:PIAA (262) 622-1143
MITCHELL DOLAN
KPRG
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US
SHIP DATE: 29APR20
ACTWGT: 45.30 LB
CAD: 6994780/SSFE2102
DIMS: 25x14x13 IN
BILL THIRD PARTY
TO EUROFINS TEST AMERICA
EUROFINS TEST AMERICA
2417 BOND ST
UNIVERSITY PARK IL 60484
(000) 000-0000
REF:
INV:
PO:
DEPT:
FedEx
Express
4 of 4
MPS# 3923 6795 1768
Mstr# 3923 6795 1735
0263
0201
THU - 30 APR 3:00P
STANDARD OVERNIGHT
AHS
60484
IL-US ORD
XH JOTA
48qt

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-134621.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-181249-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 5/8/2020			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Powerton CCR	Project #: 50011612			
Site: MWG - Powerton	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	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/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-01 (500-181249-4)	4/28/20	08:32 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-02 (500-181249-5)	4/28/20	09:56 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-03 (500-181249-6)	4/28/20	10:46 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-04 (500-181249-7)	4/28/20	11:43 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-05 (500-181249-8)	4/28/20	12:36 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-10 (500-181249-9)	4/28/20	13:39 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-08 (500-181249-10)	4/28/20	14:38 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs

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

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Stephanie Hernandez	4/29/20 1600	TA-CHI	FED EX		
2	FED EX				4/30/2020 0846	ETA STL
3						

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-134666.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-181249-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 5/8/2020			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Powerton CCR	Project #: 50011612			
Site: MWG - Powerton	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	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/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-09 (500-181249-11)	4/29/20	09:43 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-11 (500-181249-12)	4/29/20	08:41 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-12 (500-181249-13)	4/29/20	10:58 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-15 (500-181249-14)	4/29/20	12:16 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
Duplicate (500-181249-15)	4/29/20	Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs

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

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Stephanie Hernandez	4/30/20 1630	TA-CHI	FE		
2	FE					
3					5/1/2020 0834	ETASTL
4						

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-134588.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-181249-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 5/8/2020			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Powerton CCR	Project #: 50011612			
Site: MWG - Powerton	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	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)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-18 (500-181249-1)	4/27/20	10:49 Central		Water			X	1	
MW-17 (500-181249-2)	4/27/20	11:32 Central		Water			X	1	
MW-19 (500-181249-3)	4/27/20	12:19 Central		Water			X	1	

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

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	4/28-20 1630			4/28/20 9:04	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.0°C IR3

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-134616.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-181249-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 5/8/2020			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Powerton CCR	Project #: 50011612			
Site: MWG - Powerton	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	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)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
		Preservation Code:							
MW-01 (500-181249-4)	4/28/20	08:32 Central		Water			X	1	
MW-02 (500-181249-5)	4/28/20	09:56 Central		Water			X	1	
MW-03 (500-181249-6)	4/28/20	10:46 Central		Water			X	1	
MW-04 (500-181249-7)	4/28/20	11:43 Central		Water			X	1	
MW-05 (500-181249-8)	4/28/20	12:36 Central		Water			X	1	
MW-10 (500-181249-9)	4/28/20	13:39 Central		Water			X	1	
MW-08 (500-181249-10)	4/28/20	14:38 Central		Water			X	1	

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

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Stephanie Hernandez	4/29/20 1600	TA-CHI			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 4-30-20 9:27	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.0° IR7

Ver: 01/16/2019

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5/19/2020

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-134661.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-181249-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 5/8/2020			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Powerton CCR	Project #: 50011612			
Site: MWG - Powerton	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	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)	SM4500_SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-09 (500-181249-11)	4/29/20	09:43 Central		Water			X	1	
MW-11 (500-181249-12)	4/29/20	08:41 Central		Water			X	1	
MW-12 (500-181249-13)	4/29/20	10:58 Central		Water			X	1	
MW-15 (500-181249-14)	4/29/20	12:16 Central		Water			X	1	
Duplicate (500-181249-15)	4/29/20	Central		Water			X	1	

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

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Stephanie Hernandez	4/30/20 1630	TA-CHI	Kathy R Auer	5-1-20 856	
2						
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.0°C IR 8

Ver: 01/16/2019

5/19/2020

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-181249-1

Login Number: 181249
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins TestAmerica, 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	1.6,5.8,3.3,2.6,2.4,2.85
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: 500-181249-1

Login Number: 181249
List Number: 2
Creator: Gore, Beija K

List Source: Eurofins TestAmerica, Pensacola
List Creation: 04/29/20 02:02 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	1007369
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.0 °C IR 8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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: 500-181249-1

Login Number: 181249
List Number: 6
Creator: Conrady, Hank W

List Source: Eurofins TestAmerica, Pensacola
List Creation: 04/30/20 05:18 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	0.0°C IR-7
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: 500-181249-1

Login Number: 181249
List Number: 7
Creator: Avery, Kathy R

List Source: Eurofins TestAmerica, Pensacola
List Creation: 05/01/20 11:07 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	0.0°IR 8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

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

Laboratory Job ID: 500-181249-2
Client Project/Site: Powerton CCR

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

Attn: Richard Gnat

Diana Mockler

Authorized for release by:
6/2/2020 3:32:37 PM

Diana Mockler, Project Manager I
(219)252-7570
diana.mockler@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Job ID: 500-181249-2

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-181249-2

Comments
No additional comments.

Receipt
The samples were received on 4/28/2020 9:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 6 coolers at receipt time were 1.6º C, 2.4º C, 2.6º C, 2.8º C, 3.3º C and 5.8º C.

RAD
Methods 903.0, 9315: Radium-226 Prep Batch 160-470017
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

MW-15 (500-181249-14), (LCS 160-470017/1-A), (MB 160-470017/22-A), (160-37998-J-1-A) and (160-37998-J-1-B DU)

Methods 903.0, 9315: Radium-226 Prep Batch 160-469993
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-18 (500-181249-1), MW-17 (500-181249-2), MW-19 (500-181249-3), MW-01 (500-181249-4), MW-02 (500-181249-5), MW-03 (500-181249-6), MW-04 (500-181249-7), MW-05 (500-181249-8), MW-10 (500-181249-9), MW-08 (500-181249-10), MW-09 (500-181249-11), MW-11 (500-181249-12), MW-12 (500-181249-13), Duplicate (500-181249-15), (LCS 160-469993/1-A), (MB 160-469993/23-A) and (500-181249-D-1-B DU)

Methods 904.0, 9320: Ra-228 Prep Batch 160-470021
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

MW-15 (500-181249-14), (LCS 160-470021/1-A), (MB 160-470021/22-A), (160-37998-J-1-C) and (160-37998-J-1-D DU)

Methods 904.0, 9320: Radium-228 Prep Batch 160-469995
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-18 (500-181249-1), MW-17 (500-181249-2), MW-19 (500-181249-3), MW-01 (500-181249-4), MW-02 (500-181249-5), MW-03 (500-181249-6), MW-04 (500-181249-7), MW-05 (500-181249-8), MW-10 (500-181249-9), MW-08 (500-181249-10), MW-09 (500-181249-11), MW-11 (500-181249-12), MW-12 (500-181249-13), Duplicate (500-181249-15), (LCS 160-469995/1-A), (MB 160-469995/23-A) and (500-181249-D-1-D DU)

Method PrecSep_0: Radium 228 Prep Batch 160-469995:

The following samples were prepared at a reduced aliquot due to discoloration and cloudy appearance: MW-10 (500-181249-9). Samples 500-181249-9 and 160-37961-1 have a yellow discoloration and cloudy appearance. Sample 160-37961-2 has a cloudy appearance.

Method PrecSep-21: Radium 226 Prep Batch 160-469993:

The following samples were prepared at a reduced aliquot due to discoloration and cloudy appearance: MW-10 (500-181249-9). Samples

Job ID: 500-181249-2 (Continued)

Laboratory: Eurofins TestAmerica, Chicago (Continued)

500-181249-9 and 160-37961-1 have a yellow discoloration and cloudy appearance. Sample 160-37961-2 has a cloudy appearance.

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

Method Summary

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

Job ID: 500-181249-2

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

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

TAL SL = Eurofins TestAmerica, 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

Job ID: 500-181249-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-181249-1	MW-18	Water	04/27/20 10:49	04/28/20 09:35	
500-181249-2	MW-17	Water	04/27/20 11:32	04/28/20 09:35	
500-181249-3	MW-19	Water	04/27/20 12:19	04/28/20 09:35	
500-181249-4	MW-01	Water	04/28/20 08:32	04/29/20 11:30	
500-181249-5	MW-02	Water	04/28/20 09:56	04/29/20 11:30	
500-181249-6	MW-03	Water	04/28/20 10:46	04/29/20 11:30	
500-181249-7	MW-04	Water	04/28/20 11:43	04/29/20 11:30	
500-181249-8	MW-05	Water	04/28/20 12:36	04/29/20 11:30	
500-181249-9	MW-10	Water	04/28/20 13:39	04/29/20 11:30	
500-181249-10	MW-08	Water	04/28/20 14:38	04/29/20 11:30	
500-181249-11	MW-09	Water	04/29/20 09:43	04/30/20 09:40	
500-181249-12	MW-11	Water	04/29/20 08:41	04/30/20 09:40	
500-181249-13	MW-12	Water	04/29/20 10:58	04/30/20 09:40	
500-181249-14	MW-15	Water	04/29/20 12:16	04/30/20 09:40	
500-181249-15	Duplicate	Water	04/29/20 00:00	04/30/20 09:40	

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

Job ID: 500-181249-2

Client Sample ID: MW-18

Date Collected: 04/27/20 10:49
Date Received: 04/28/20 09:35

Lab Sample ID: 500-181249-1

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.179		0.113	0.115	1.00	0.158	pCi/L	05/11/20 10:44	06/02/20 06:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.0*		*40 - 110*	*05/11/20 10:44*	*06/02/20 06:04*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.157	U	0.310	0.310	1.00	0.526	pCi/L	05/11/20 11:12	05/27/20 10:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.0*		*40 - 110*	*05/11/20 11:12*	*05/27/20 10:59*	*1*
Y Carrier	*84.9*		*40 - 110*	*05/11/20 11:12*	*05/27/20 10:59*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.336	U	0.330	0.331	5.00	0.526	pCi/L		06/02/20 12:48	1

Client Sample ID: MW-17

Date Collected: 04/27/20 11:32
Date Received: 04/28/20 09:35

Lab Sample ID: 500-181249-2

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.155**		0.0862	0.0873	1.00	0.101	pCi/L	05/11/20 10:44	06/02/20 06:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.8*		*40 - 110*	*05/11/20 10:44*	*06/02/20 06:05*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.208	U	0.265	0.266	1.00	0.498	pCi/L	05/11/20 11:12	05/27/20 11:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.8*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*
Y Carrier	*90.1*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0538	U	0.279	0.280	5.00	0.498	pCi/L		06/02/20 12:48	1

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

Job ID: 500-181249-2

Client Sample ID: MW-19

Date Collected: 04/27/20 12:19
Date Received: 04/28/20 09:35

Lab Sample ID: 500-181249-3

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.146		0.0847	0.0857	1.00	0.0995	pCi/L	05/11/20 10:44	06/02/20 06:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.7*		*40 - 110*	*05/11/20 10:44*	*06/02/20 06:05*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.484		0.292	0.296	1.00	0.446	pCi/L	05/11/20 11:12	05/27/20 11:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.7*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*
Y Carrier	*88.6*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.630		0.304	0.308	5.00	0.446	pCi/L		06/02/20 12:48	1

Client Sample ID: MW-01

Date Collected: 04/28/20 08:32
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-4

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.114		0.0768	0.0775	1.00	0.0939	pCi/L	05/11/20 10:44	06/02/20 06:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.4*		*40 - 110*	*05/11/20 10:44*	*06/02/20 06:05*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.514		0.304	0.308	1.00	0.462	pCi/L	05/11/20 11:12	05/27/20 11:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.4*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*
Y Carrier	*87.1*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.628		0.314	0.318	5.00	0.462	pCi/L		06/02/20 12:48	1

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

Job ID: 500-181249-2

Client Sample ID: MW-02

Date Collected: 04/28/20 09:56
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-5

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0240	U	0.0562	0.0563	1.00	0.107	pCi/L	05/11/20 10:44	06/02/20 06:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.6*		*40 - 110*	*05/11/20 10:44*	*06/02/20 06:05*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0440	U	0.308	0.308	1.00	0.540	pCi/L	05/11/20 11:12	05/27/20 11:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.6*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*
Y Carrier	*87.9*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0680	U	0.313	0.313	5.00	0.540	pCi/L		06/02/20 12:48	1

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

Job ID: 500-181249-2

Client Sample ID: MW-03

Date Collected: 04/28/20 10:46
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-6

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0127	U	0.0385	0.0385	1.00	0.0996	pCi/L	05/11/20 10:44	06/02/20 06:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.3*		*40 - 110*	*05/11/20 10:44*	*06/02/20 06:05*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.201	U	0.297	0.298	1.00	0.498	pCi/L	05/11/20 11:12	05/27/20 11:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.3*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*
Y Carrier	*90.1*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.189	U	0.299	0.300	5.00	0.498	pCi/L		06/02/20 12:48	1

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

Job ID: 500-181249-2

Client Sample ID: MW-04

Date Collected: 04/28/20 11:43
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-7

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0695	U	0.0692	0.0695	1.00	0.105	pCi/L	05/11/20 10:44	06/02/20 06:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.3*		*40 - 110*	*05/11/20 10:44*	*06/02/20 06:05*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.145	U	0.274	0.274	1.00	0.465	pCi/L	05/11/20 11:12	05/27/20 11:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.3*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*
Y Carrier	*90.8*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.215	U	0.283	0.283	5.00	0.465	pCi/L		06/02/20 12:48	1

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

Job ID: 500-181249-2

Client Sample ID: MW-05
Date Collected: 04/28/20 12:36
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-8
Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.105	U	0.0812	0.0817	1.00	0.113	pCi/L	05/11/20 10:44	06/02/20 06:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.1*		*40 - 110*	*05/11/20 10:44*	*06/02/20 06:06*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.402	U	0.297	0.300	1.00	0.466	pCi/L	05/11/20 11:12	05/27/20 11:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.1*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*
Y Carrier	*86.4*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.508**		0.308	0.311	5.00	0.466	pCi/L		06/02/20 12:48	1

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

Job ID: 500-181249-2

Client Sample ID: MW-10

Date Collected: 04/28/20 13:39
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-9

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.223**		0.126	0.128	1.00	0.164	pCi/L	05/11/20 10:44	06/02/20 06:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.0*		*40 - 110*	*05/11/20 10:44*	*06/02/20 06:06*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.416	U	0.348	0.350	1.00	0.557	pCi/L	05/11/20 11:12	05/27/20 11:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.0*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*
Y Carrier	*88.6*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.639**		0.370	0.373	5.00	0.557	pCi/L		06/02/20 12:48	1

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

Job ID: 500-181249-2

Client Sample ID: MW-08

Date Collected: 04/28/20 14:38
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-10

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0660	U	0.0739	0.0742	1.00	0.118	pCi/L	05/11/20 10:44	06/02/20 06:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.0*		*40 - 110*	*05/11/20 10:44*	*06/02/20 06:06*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0805	U	0.259	0.259	1.00	0.450	pCi/L	05/11/20 11:12	05/27/20 11:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.0*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*
Y Carrier	*91.2*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.147	U	0.269	0.269	5.00	0.450	pCi/L		06/02/20 12:48	1

Client Sample ID: MW-09

Date Collected: 04/29/20 09:43
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-11

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0472	U	0.0631	0.0632	1.00	0.105	pCi/L	05/11/20 10:44	06/02/20 08:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.2*		*40 - 110*	*05/11/20 10:44*	*06/02/20 08:10*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.267	U	0.415	0.416	1.00	0.698	pCi/L	05/11/20 11:12	05/27/20 11:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.2*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*
Y Carrier	*65.8*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.314	U	0.420	0.421	5.00	0.698	pCi/L		06/02/20 12:27	1

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

Job ID: 500-181249-2

Client Sample ID: MW-11

Date Collected: 04/29/20 08:41
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-12

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.253**		0.104	0.106	1.00	0.0964	pCi/L	05/11/20 10:44	06/02/20 08:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.7*		*40 - 110*	*05/11/20 10:44*	*06/02/20 08:10*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.218	U	0.266	0.267	1.00	0.440	pCi/L	05/11/20 11:12	05/27/20 11:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.7*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:01*	*1*
Y Carrier	*89.7*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:01*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.470**		0.286	0.287	5.00	0.440	pCi/L		06/02/20 12:27	1

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

Job ID: 500-181249-2

Client Sample ID: MW-12

Date Collected: 04/29/20 10:58
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-13

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0714	U	0.0906	0.0909	1.00	0.151	pCi/L	05/11/20 10:44	06/02/20 08:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.1*		*40 - 110*	*05/11/20 10:44*	*06/02/20 08:11*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.506**		0.285	0.289	1.00	0.429	pCi/L	05/11/20 11:12	05/27/20 11:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.1*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:01*	*1*
Y Carrier	*89.0*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:01*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.578**		0.299	0.303	5.00	0.429	pCi/L		06/02/20 12:27	1

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

Job ID: 500-181249-2

Client Sample ID: MW-15

Date Collected: 04/29/20 12:16
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-14

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.183		0.0787	0.0804	1.00	0.0730	pCi/L	05/11/20 14:42	06/02/20 04:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*40 - 110*	*05/11/20 14:42*	*06/02/20 04:06*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.156	U	0.261	0.261	1.00	0.441	pCi/L	05/11/20 15:09	05/21/20 12:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*40 - 110*	*05/11/20 15:09*	*05/21/20 12:21*	*1*
Y Carrier	*92.0*		*40 - 110*	*05/11/20 15:09*	*05/21/20 12:21*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.339	U	0.273	0.273	5.00	0.441	pCi/L		06/02/20 12:27	1

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

Job ID: 500-181249-2

Client Sample ID: Duplicate

Date Collected: 04/29/20 00:00
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-15

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.124		0.0880	0.0887	1.00	0.120	pCi/L	05/11/20 10:44	06/02/20 08:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.3*		*40 - 110*	*05/11/20 10:44*	*06/02/20 08:11*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.193	U	0.304	0.304	1.00	0.510	pCi/L	05/11/20 11:12	05/27/20 11:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.3*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:01*	*1*
Y Carrier	*87.1*		*40 - 110*	*05/11/20 11:12*	*05/27/20 11:01*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.317	U	0.316	0.317	5.00	0.510	pCi/L		06/02/20 12:28	1

Definitions/Glossary

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

Job ID: 500-181249-2

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.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Rad

Prep Batch: 469993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-1	MW-18	Total/NA	Water	PrecSep-21	
500-181249-2	MW-17	Total/NA	Water	PrecSep-21	
500-181249-3	MW-19	Total/NA	Water	PrecSep-21	
500-181249-4	MW-01	Total/NA	Water	PrecSep-21	
500-181249-5	MW-02	Total/NA	Water	PrecSep-21	
500-181249-6	MW-03	Total/NA	Water	PrecSep-21	
500-181249-7	MW-04	Total/NA	Water	PrecSep-21	
500-181249-8	MW-05	Total/NA	Water	PrecSep-21	
500-181249-9	MW-10	Total/NA	Water	PrecSep-21	
500-181249-10	MW-08	Total/NA	Water	PrecSep-21	
500-181249-11	MW-09	Total/NA	Water	PrecSep-21	
500-181249-12	MW-11	Total/NA	Water	PrecSep-21	
500-181249-13	MW-12	Total/NA	Water	PrecSep-21	
500-181249-15	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-469993/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-469993/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-181249-1 DU	MW-18	Total/NA	Water	PrecSep-21	

Prep Batch: 469995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-1	MW-18	Total/NA	Water	PrecSep_0	
500-181249-2	MW-17	Total/NA	Water	PrecSep_0	
500-181249-3	MW-19	Total/NA	Water	PrecSep_0	
500-181249-4	MW-01	Total/NA	Water	PrecSep_0	
500-181249-5	MW-02	Total/NA	Water	PrecSep_0	
500-181249-6	MW-03	Total/NA	Water	PrecSep_0	
500-181249-7	MW-04	Total/NA	Water	PrecSep_0	
500-181249-8	MW-05	Total/NA	Water	PrecSep_0	
500-181249-9	MW-10	Total/NA	Water	PrecSep_0	
500-181249-10	MW-08	Total/NA	Water	PrecSep_0	
500-181249-11	MW-09	Total/NA	Water	PrecSep_0	
500-181249-12	MW-11	Total/NA	Water	PrecSep_0	
500-181249-13	MW-12	Total/NA	Water	PrecSep_0	
500-181249-15	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-469995/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-469995/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-181249-1 DU	MW-18	Total/NA	Water	PrecSep_0	

Prep Batch: 470017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-14	MW-15	Total/NA	Water	PrecSep-21	
MB 160-470017/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-470017/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 470021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-181249-14	MW-15	Total/NA	Water	PrecSep_0	
MB 160-470021/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-470021/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-469993/23-A
Matrix: Water
Analysis Batch: 471667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 469993

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04301	U	0.0527	0.0529	1.00	0.0852	pCi/L	05/11/20 10:44	06/02/20 08:12	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.4*		*40 - 110*	*05/11/20 10:44*	*06/02/20 08:12*	*1*

Lab Sample ID: LCS 160-469993/1-A
Matrix: Water
Analysis Batch: 471667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 469993

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	9.701		1.05	1.00	0.101	pCi/L	85	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*87.0*		*40 - 110*

Lab Sample ID: 500-181249-1 DU
Matrix: Water
Analysis Batch: 471667

Client Sample ID: MW-18
Prep Type: Total/NA
Prep Batch: 469993

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.179			0.1546		0.0962	1.00	0.117	pCi/L			0.12	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*69.6*		*40 - 110*

Lab Sample ID: MB 160-470017/22-A
Matrix: Water
Analysis Batch: 471667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 470017

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.01108	U	0.0358	0.0358	1.00	0.0713	pCi/L	05/11/20 14:42	06/02/20 06:03	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.9*		*40 - 110*	*05/11/20 14:42*	*06/02/20 06:03*	*1*

Lab Sample ID: LCS 160-470017/1-A
Matrix: Water
Analysis Batch: 471667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 470017

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.89		1.11	1.00	0.0668	pCi/L	96	75 - 125		

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

Lab Sample ID: LCS 160-470017/1-A
Matrix: Water
Analysis Batch: 471667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 470017

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	96.1		40 - 110

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-469995/23-A
Matrix: Water
Analysis Batch: 471336

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 469995

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.02092	U	0.186	0.186	1.00	0.333	pCi/L	05/11/20 11:12	05/27/20 11:03	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	86.4		40 - 110	05/11/20 11:12	05/27/20 11:03	1
Y Carrier	95.7		40 - 110	05/11/20 11:12	05/27/20 11:03	1

Lab Sample ID: LCS 160-469995/1-A
Matrix: Water
Analysis Batch: 471338

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 469995

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.80	9.582		1.13	1.00	0.484	pCi/L	109	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	87.0		40 - 110
Y Carrier	86.7		40 - 110

Lab Sample ID: 500-181249-1 DU
Matrix: Water
Analysis Batch: 471338

Client Sample ID: MW-18
Prep Type: Total/NA
Prep Batch: 469995

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.157	U		0.02472	U	0.347	1.00	0.608	pCi/L			0.20	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	69.6		40 - 110
Y Carrier	89.0		40 - 110

Lab Sample ID: MB 160-470021/22-A
Matrix: Water
Analysis Batch: 471097

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 470021

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.01685	U	0.247	0.247	1.00	0.440	pCi/L	05/11/20 15:09	05/21/20 12:18	1

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

Lab Sample ID: MB 160-470021/22-A
Matrix: Water
Analysis Batch: 471097

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 470021

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	94.9		40 - 110	05/11/20 15:09	05/21/20 12:18	1
Y Carrier	93.5		40 - 110	05/11/20 15:09	05/21/20 12:18	1

Lab Sample ID: LCS 160-470021/1-A
Matrix: Water
Analysis Batch: 471096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 470021

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.82	8.132		0.976	1.00	0.400	pCi/L	92	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	96.1		40 - 110
Y Carrier	89.7		40 - 110

Lab Chronicle

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

Job ID: 500-181249-2

Client Sample ID: MW-18
Date Collected: 04/27/20 10:49
Date Received: 04/28/20 09:35

Lab Sample ID: 500-181249-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			469993	05/11/20 10:44	RBR	TAL SL
Total/NA	Analysis	903.0		1	471667	06/02/20 06:04	KLS	TAL SL
Total/NA	Prep	PrecSep_0			469995	05/11/20 11:12	RBR	TAL SL
Total/NA	Analysis	904.0		1	471338	05/27/20 10:59	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471698	06/02/20 12:48	SMP	TAL SL

Client Sample ID: MW-17
Date Collected: 04/27/20 11:32
Date Received: 04/28/20 09:35

Lab Sample ID: 500-181249-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			469993	05/11/20 10:44	RBR	TAL SL
Total/NA	Analysis	903.0		1	471667	06/02/20 06:05	KLS	TAL SL
Total/NA	Prep	PrecSep_0			469995	05/11/20 11:12	RBR	TAL SL
Total/NA	Analysis	904.0		1	471338	05/27/20 11:00	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471698	06/02/20 12:48	SMP	TAL SL

Client Sample ID: MW-19
Date Collected: 04/27/20 12:19
Date Received: 04/28/20 09:35

Lab Sample ID: 500-181249-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			469993	05/11/20 10:44	RBR	TAL SL
Total/NA	Analysis	903.0		1	471667	06/02/20 06:05	KLS	TAL SL
Total/NA	Prep	PrecSep_0			469995	05/11/20 11:12	RBR	TAL SL
Total/NA	Analysis	904.0		1	471338	05/27/20 11:00	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471698	06/02/20 12:48	SMP	TAL SL

Client Sample ID: MW-01
Date Collected: 04/28/20 08:32
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			469993	05/11/20 10:44	RBR	TAL SL
Total/NA	Analysis	903.0		1	471667	06/02/20 06:05	KLS	TAL SL
Total/NA	Prep	PrecSep_0			469995	05/11/20 11:12	RBR	TAL SL
Total/NA	Analysis	904.0		1	471338	05/27/20 11:00	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471698	06/02/20 12:48	SMP	TAL SL

Lab Chronicle

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

Job ID: 500-181249-2

Client Sample ID: MW-02
Date Collected: 04/28/20 09:56
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			469993	05/11/20 10:44	RBR	TAL SL
Total/NA	Analysis	903.0		1	471667	06/02/20 06:05	KLS	TAL SL
Total/NA	Prep	PrecSep_0			469995	05/11/20 11:12	RBR	TAL SL
Total/NA	Analysis	904.0		1	471338	05/27/20 11:00	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471698	06/02/20 12:48	SMP	TAL SL

Client Sample ID: MW-03
Date Collected: 04/28/20 10:46
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			469993	05/11/20 10:44	RBR	TAL SL
Total/NA	Analysis	903.0		1	471667	06/02/20 06:05	KLS	TAL SL
Total/NA	Prep	PrecSep_0			469995	05/11/20 11:12	RBR	TAL SL
Total/NA	Analysis	904.0		1	471338	05/27/20 11:00	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471698	06/02/20 12:48	SMP	TAL SL

Client Sample ID: MW-04
Date Collected: 04/28/20 11:43
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			469993	05/11/20 10:44	RBR	TAL SL
Total/NA	Analysis	903.0		1	471667	06/02/20 06:05	KLS	TAL SL
Total/NA	Prep	PrecSep_0			469995	05/11/20 11:12	RBR	TAL SL
Total/NA	Analysis	904.0		1	471338	05/27/20 11:00	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471698	06/02/20 12:48	SMP	TAL SL

Client Sample ID: MW-05
Date Collected: 04/28/20 12:36
Date Received: 04/29/20 11:30

Lab Sample ID: 500-181249-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			469993	05/11/20 10:44	RBR	TAL SL
Total/NA	Analysis	903.0		1	471667	06/02/20 06:06	KLS	TAL SL
Total/NA	Prep	PrecSep_0			469995	05/11/20 11:12	RBR	TAL SL
Total/NA	Analysis	904.0		1	471338	05/27/20 11:00	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471698	06/02/20 12:48	SMP	TAL SL

Lab Chronicle

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

Job ID: 500-181249-2

Client Sample ID: MW-10

Lab Sample ID: 500-181249-9

Date Collected: 04/28/20 13:39

Matrix: Water

Date Received: 04/29/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			469993	05/11/20 10:44	RBR	TAL SL
Total/NA	Analysis	903.0		1	471667	06/02/20 06:06	KLS	TAL SL
Total/NA	Prep	PrecSep_0			469995	05/11/20 11:12	RBR	TAL SL
Total/NA	Analysis	904.0		1	471338	05/27/20 11:00	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471698	06/02/20 12:48	SMP	TAL SL

Client Sample ID: MW-08

Lab Sample ID: 500-181249-10

Date Collected: 04/28/20 14:38

Matrix: Water

Date Received: 04/29/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			469993	05/11/20 10:44	RBR	TAL SL
Total/NA	Analysis	903.0		1	471667	06/02/20 06:06	KLS	TAL SL
Total/NA	Prep	PrecSep_0			469995	05/11/20 11:12	RBR	TAL SL
Total/NA	Analysis	904.0		1	471338	05/27/20 11:00	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471698	06/02/20 12:48	SMP	TAL SL

Client Sample ID: MW-09

Lab Sample ID: 500-181249-11

Date Collected: 04/29/20 09:43

Matrix: Water

Date Received: 04/30/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			469993	05/11/20 10:44	RBR	TAL SL
Total/NA	Analysis	903.0		1	471667	06/02/20 08:10	KLS	TAL SL
Total/NA	Prep	PrecSep_0			469995	05/11/20 11:12	RBR	TAL SL
Total/NA	Analysis	904.0		1	471338	05/27/20 11:00	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471690	06/02/20 12:27	SMP	TAL SL

Client Sample ID: MW-11

Lab Sample ID: 500-181249-12

Date Collected: 04/29/20 08:41

Matrix: Water

Date Received: 04/30/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			469993	05/11/20 10:44	RBR	TAL SL
Total/NA	Analysis	903.0		1	471667	06/02/20 08:10	KLS	TAL SL
Total/NA	Prep	PrecSep_0			469995	05/11/20 11:12	RBR	TAL SL
Total/NA	Analysis	904.0		1	471338	05/27/20 11:01	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471690	06/02/20 12:27	SMP	TAL SL

Lab Chronicle

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

Job ID: 500-181249-2

Client Sample ID: MW-12

Date Collected: 04/29/20 10:58
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			469993	05/11/20 10:44	RBR	TAL SL
Total/NA	Analysis	903.0		1	471667	06/02/20 08:11	KLS	TAL SL
Total/NA	Prep	PrecSep_0			469995	05/11/20 11:12	RBR	TAL SL
Total/NA	Analysis	904.0		1	471338	05/27/20 11:01	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471690	06/02/20 12:27	SMP	TAL SL

Client Sample ID: MW-15

Date Collected: 04/29/20 12:16
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			470017	05/11/20 14:42	MNH	TAL SL
Total/NA	Analysis	903.0		1	471667	06/02/20 04:06	KLS	TAL SL
Total/NA	Prep	PrecSep_0			470021	05/11/20 15:09	MNH	TAL SL
Total/NA	Analysis	904.0		1	471096	05/21/20 12:21	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471690	06/02/20 12:27	SMP	TAL SL

Client Sample ID: Duplicate

Date Collected: 04/29/20 00:00
Date Received: 04/30/20 09:40

Lab Sample ID: 500-181249-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			469993	05/11/20 10:44	RBR	TAL SL
Total/NA	Analysis	903.0		1	471667	06/02/20 08:11	KLS	TAL SL
Total/NA	Prep	PrecSep_0			469995	05/11/20 11:12	RBR	TAL SL
Total/NA	Analysis	904.0		1	471338	05/27/20 11:01	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	471690	06/02/20 12:28	SMP	TAL SL

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 500-181249-2

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-20 *

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	004553	11-30-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 60
Phone: 708.534.5200 Fax: 708.53

500-181249 COC

(optional)
Report To
Contact:
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-181249

Chain of Custody Number:

Page 1 of 1

Temperature °C of Cooler: 0.6→4.6

Client: KPRG
Client Project #: 12313.1
Project Name: Powerton CCR
Project Location/State: Pekin, IL
Lab Project #: 50011612
Sampler: M. Mitchel Dolan
Lab PM: Diana Mozkler

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	3	3	8	8	8					Comments
							Parameter	9030, 9040.0	6010C, 6020A, D420A	[redacted]	Total Cl, Fl, TDS	Sulfate					
1		MW-18	4/27	1049	6	W		X	X		X	X					
2		MW-17	4/27	1132	6	W		X	X		X	X					
3		MW-19	4/27	1219	6	W		X	X		X	X					

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Mitchel Dolan	KPRG	4/27/20	1630	FEDEX		4/27/20	1630
				Rhondeott	TA-CHI	4/28/20	0935

Lab Courier
Shipped Fed Ex
Hand Delivered

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)

6/2/2020

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

Chain of Custody Record

eurofins | Environment Testing America

500-181249 COC

Client Information	Sampler: Mitchel Dolan	Lab PM: Mockler, Diana J	Car	COC No: 500-80728-36997.1
Client Contact: Mitchel Dolan	Phone: 262-622-1143	E-Mail: diana.mockler@testamericainc.com		Page: Page 1 of 1
Company: KPRG and Associates, Inc.				Job #: 500-181249
Address: 14665 West Lisbon Road, Suite 1A	Due Date Requested:			
City: Brookfield	TAT Requested (days):			
State, Zip: WI, 53005				
Phone: 309-477-5240(Tel)	PO #: 4501908159			
Email: mitcheld@kprginc.com	WO #:			
Project Name: Powerton CCR Event Desc: Quarterly Powerton CCR Samplling	Project #: 50011612			
Site: Illinois	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0, 904.0	6010C, 6020A, 7470A	2540C, 4500_F_C, SM4500_Cl_E, SM4500_SO4_E	SM4500_SO4_E - Local Method	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N		
MW-01	4/28/20	0832	G	Water			X	X	X	X		
MW-02		0956		Water								
MW-03		1046		Water								
MW-04		1143		Water								
MW-05		1236		Water								
MW-10		1339		Water								
				Water								

4 5 6 7 8 9

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: Powerton FAB App IV Parameters

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	4/28/20 / 1600	KPRG	FEDEX	4/28/20 / 1600	
Relinquished by:	Date/Time:	Company	Received by: [signature]	4/29/20 1130	TA-CHI
Relinquished by	Date/Time.	Company	Received by:	Date/Time: 1130	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 5.8 33

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

(optional)
Report To
Contact:
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-181249

Chain of Custody Number:

Page 1 of 1

Temperature °C of Cooler:

Client: KPRG
Client Project #: 12313.1
Project Name: Powerton CCR
Project Location/State: Pekin, IL
Lab Project #: 50011612
Sampler: Michael Dolan
Lab PM: Diana Mockler

Preservative: 8 | 8 | 3 | 3

Parameter: Total TDS, Cl, Fl, SO4 | Total Sulfate | Total Metals | Rad 226/228

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH. Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Total TDS, Cl, Fl, SO4	Total Sulfate	Total Metals	Rad 226/228	Comments
4		MW-01	4/28	0832	6	W	X	X	X	X	
10		MW-08	4/28	1438	6	W	X	X	X	X	

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	KPRG	4/28/20	1600	FEDEX		4/28/20	1600
				[signature]	TA-CHI	4/29/20	1130

Lab Courier:
Shipped: FXG
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments
Powerton ABB/ASB App. IV Parameters.
*One set of CCR samples collected for MW-01. Well falls under both ABB/ASB + FAB

Lab Comments:

TAL-4124-500 (1209)

6/2/2020

Eurofins TestAmerica, Chicago
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University Park, IL 60484
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Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Mitchel Dolan	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-80729-36998.1
Client Contact: Mitchel Dolan	Phone: 262-622-1143	E-Mail: diana.mockler@testamericainc.com		Page: Page 1 of 1
Company: KPRG and Associates, Inc.				Job #: 500-181249

Address: 14665 West Lisbon Road, Suite 1A	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Brookfield	TAT Requested (days):		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, Z - other (specify)
State, Zip: WI, 53005			
Phone: 309-477-5240(Tel)	PO #: 4501908159		
Email: mitcheld@kprginc.com	WO #:		Other:
Project Name: Powerton CCR Event Desc: Quarterly Powerton CCR Samplling	Project #: 50011612		
Site: Illinois	SSOW#:		

500-181249 COC

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, 904.0	6010C, 6020A, 7470A	2540C, 4500_F_C, SM4500_Cl_E, SM4500_SO4_E	SM4500_SO4_E - Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N		
11 MW-09	4/29/20	0943	G	Water			X	X	X	X		
12 MW-11	4/29/20	0841	G	Water			X	X	X	X		
13 MW-12	4/29/20	1058	G	Water			X	X	X	X		
14 MW-15	4/29/20	1216	G	Water			X	X	X	X		
15 DUPLICATE	4/29/20	-	G	Water			X	X	X	X		
MW-05				Water								
MW-17				Water								
MW-18				Water								
MW-19				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:	Date/Time:	Company	Received by	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Mitchel Dolan	4/29/20 1500	KPRG	FEDEX	4/29/20 1500	
			Shari Knott	4/30/20 0940	TA-CHI

Custody Seals Intact: ∧ Yes ∆ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 1.6→2.6, 2.4, 1.8→2.8


ORIGIN ID:PIAA (262) 622-1143
MITCHELL DOLAN
KPRG
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US
SHIP DATE: 27APR20
ACTWGT: 41.05 LB
CAD: 6994780/SSFE2102
DIMS: 24x13x14 IN
BILL THIRD PARTY
TO EUROFINS TEST AMERICA
EUROFINS TEST AMERICA
2417 BOND ST
UNIVERSITY PARK IL 6048
500-181249 Wayb
(000) 000-0000
REF:
INV:
PO:
DEPT:
FedEx
Express
2 of 3
MPS# 0263 3922 9282 8776
Mstr# 3922 9282 8765
0201
TUE - 28 APR 3:00P
STANDARD OVERNIGHT
XH JOTA
60484
IL-US ORD
RT 519
ST 33
5
15:00
A
8776
04.28


ORIGIN ID:PIAA (262) 622-1143
MITCHELL DOLAN
KPRG
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US
SHIP DATE: 29APR20
ACTWGT: 47.45 LB
CAD: 6994780/SSFE2102
DIMS: 25x14x13 IN
BILL THIRD PARTY
TO EUROFINS TEST AMERICA
EUROFINS TEST AMERICA
2417 BOND ST
UNIVERSITY PARK IL 60484
(000) 000-0000
REF:
INV:
PO:
DEPT:
500-181249 Wayt
FedEx
Express
1 of 4
TRK# 0201 3923 6795 1735
THU - 30 APR 3:00P
STANDARD OVERNIGHT
MASTER
XH JOTA
AHS
60484
IL-US ORD
48qt.


ORIGIN ID:PIAA (262) 622-1143
MITCHELL DOLAN
KPRG
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US
SHIP DATE: 29APR20
ACTWGT: 46.80 LB
CAD: 6994780/SSFE2102
DIMS: 25x14x13 IN
BILL THIRD PARTY
TO EUROFINS TEST AMERICA
EUROFINS TEST AMERICA
2417 BOND ST
UNIVERSITY PARK IL 60484
(000) 000-0000
REF:
INV:
PO:
DEPT:
FedEx
Express
3 of 4
MPS# 3923 6795 1757
Mstr# 3923 6795 1735
0263
0201
THU - 30 APR 3:00P
STANDARD OVERNIGHT
AHS
60484
IL-US ORD
XH JOTA
48qt.


ORIGIN ID:PIAA (262) 622-1143
MITCHELL DOLAN
KPRG
414 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US
SHIP DATE: 29APR20
ACTWGT: 45.30 LB
CAD: 6994780/SSFE2102
DIMS: 25x14x13 IN
BILL THIRD PARTY
TO EUROFINS TEST AMERICA
EUROFINS TEST AMERICA
2417 BOND ST
UNIVERSITY PARK IL 60484
(000) 000-0000
REF:
INV:
PO:
DEPT:
FedEx
Express
4 of 4
MPS# 3923 6795 1768
Mstr# 3923 6795 1735
0263
0201
THU - 30 APR 3:00P
STANDARD OVERNIGHT
AHS
60484
IL-US ORD
XH JOTA
48qt

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-134595.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-181249-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 5/8/2020			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Powerton CCR	Project #: 50011612			
Site: MWG - Powerton	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	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/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-18 (500-181249-1)	4/27/20	10:49 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-17 (500-181249-2)	4/27/20	11:32 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-19 (500-181249-3)	4/27/20	12:19 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs

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

Possible Hazard Identification: Unconfirmed	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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time: Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature] FE	4-28-20 1630	TA	FE		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
FE			[signature]	4/29/2020 09:03	ETA STL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-134621.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-181249-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 5/8/2020			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Powerton CCR	Project #: 50011612			
Site: MWG - Powerton	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	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/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-01 (500-181249-4)	4/28/20	08:32 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-02 (500-181249-5)	4/28/20	09:56 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-03 (500-181249-6)	4/28/20	10:46 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-04 (500-181249-7)	4/28/20	11:43 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-05 (500-181249-8)	4/28/20	12:36 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-10 (500-181249-9)	4/28/20	13:39 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-08 (500-181249-10)	4/28/20	14:38 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs

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

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Stephanie Hernandez	4/29/20 1600	TA-CHI	FED EX		
2	FED EX				4/30/2020 0846	ETA STL
3						

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-134666.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: diana.mockler@testamericainc.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-181249-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 5/8/2020			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Powerton CCR	Project #: 50011612			
Site: MWG - Powerton	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	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/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-09 (500-181249-11)	4/29/20	09:43 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-11 (500-181249-12)	4/29/20	08:41 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-12 (500-181249-13)	4/29/20	10:58 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-15 (500-181249-14)	4/29/20	12:16 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
Duplicate (500-181249-15)	4/29/20	Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs

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

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Stephanie Hernandez	4/30/20 1630	TA-CHI	FE		
2	FE				5/1/2020 0834	ETASTL
3						

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

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-181249-2

Login Number: 181249
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins TestAmerica, 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	1.6,5.8,3.3,2.6,2.4,2.85
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: 500-181249-2

Login Number: 181249
List Number: 3
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 04/29/20 08:31 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: 500-181249-2

Login Number: 181249
List Number: 4
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 04/29/20 08:35 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: 500-181249-2

Login Number: 181249
List Number: 5
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 04/30/20 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.	N/A	
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: 500-181249-2

Login Number: 181249
List Number: 8
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 05/01/20 07:38 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	

Tracer/Carrier Summary

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

Job ID: 500-181249-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits) Ba Carrier (40-110)
500-181249-1	MW-18	78.0
500-181249-1 DU	MW-18	69.6
500-181249-2	MW-17	82.8
500-181249-3	MW-19	80.7
500-181249-4	MW-01	77.4
500-181249-5	MW-02	75.6
500-181249-6	MW-03	81.3
500-181249-7	MW-04	78.3
500-181249-8	MW-05	77.1
500-181249-9	MW-10	94.0
500-181249-10	MW-08	81.0
500-181249-11	MW-09	70.2
500-181249-12	MW-11	83.7
500-181249-13	MW-12	80.1
500-181249-14	MW-15	85.5
500-181249-15	Duplicate	78.3
LCS 160-469993/1-A	Lab Control Sample	87.0
LCS 160-470017/1-A	Lab Control Sample	96.1
MB 160-469993/23-A	Method Blank	86.4
MB 160-470017/22-A	Method Blank	94.9

Tracer/Carrier Legend

Ba Carrier = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits) Ba Carrier (40-110)	Y Carrier (40-110)
500-181249-1	MW-18	78.0	84.9
500-181249-1 DU	MW-18	69.6	89.0
500-181249-2	MW-17	82.8	90.1
500-181249-3	MW-19	80.7	88.6
500-181249-4	MW-01	77.4	87.1
500-181249-5	MW-02	75.6	87.9
500-181249-6	MW-03	81.3	90.1
500-181249-7	MW-04	78.3	90.8
500-181249-8	MW-05	77.1	86.4
500-181249-9	MW-10	94.0	88.6
500-181249-10	MW-08	81.0	91.2
500-181249-11	MW-09	70.2	65.8
500-181249-12	MW-11	83.7	89.7
500-181249-13	MW-12	80.1	89.0
500-181249-14	MW-15	85.5	92.0
500-181249-15	Duplicate	78.3	87.1
LCS 160-469995/1-A	Lab Control Sample	87.0	86.7
LCS 160-470021/1-A	Lab Control Sample	96.1	89.7
MB 160-469995/23-A	Method Blank	86.4	95.7
MB 160-470021/22-A	Method Blank	94.9	93.5

Tracer/Carrier Summary

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

Job ID: 500-181249-2

Tracer/Carrier Legend

Ba Carrier = Ba Carrier
Y Carrier = Y Carrier

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ANALYTICAL REPORT

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

Laboratory Job ID: 500-192075-1
Client Project/Site: Powerton CCR FAB

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

Attn: Richard Gnat

Robin M Kintz

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LINKS

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

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

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Job ID: 500-192075-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-192075-1

Comments
No additional comments.

Receipt
The samples were received on 12/8/2020 10:05 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were -2.3º C, -1.1º C, -0.1º C and 0.3º C.

Metals
Method 6010C: The interference check standard solution (ICSA) associated with Analytical batch 500-576167 had results for Lithium above the reporting limit (RL). Associated samples MW-01 (500-192075-1) were non-detects for Lithium, therefore the data has been reported.

Method 6020A: The internal standard Terbium (Tb) was used to report the elements Lead and Thallium in batch 500-576644. This was due to the LCS being spiked with the trace digestion spike which contains Bismuth.

Method 6020A: The internal standard Terbium (Tb) was used to report the elements Lead and Thallium in batch 500-577089. This was due to the LCS being spiked with the trace digestion spike which contains Bismuth.

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.

Detection Summary

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

Job ID: 500-192075-1

Client Sample ID: MW-01 — Lab Sample ID: 500-192075-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.058		0.0025		mg/L	1		6020A	Total Recoverable
Boron	0.59		0.050		mg/L	1		6020A	Total Recoverable
Calcium	100		0.20		mg/L	1		6020A	Total Recoverable
Molybdenum	0.0052		0.0050		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	640		10		mg/L	1		SM 2540C	Total/NA
Chloride	54		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.25		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	55		25		mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-10 — Lab Sample ID: 500-192075-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0015		0.0010		mg/L	1		6020A	Total Recoverable
Barium	0.28		0.0025		mg/L	1		6020A	Total Recoverable
Boron	2.4		0.50		mg/L	10		6020A	Total Recoverable
Calcium	120		0.20		mg/L	1		6020A	Total Recoverable
Cobalt	0.0089		0.0010		mg/L	1		6020A	Total Recoverable
Lead	0.0023		0.00050		mg/L	1		6020A	Total Recoverable
Selenium	0.0031		0.0025		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	550		10		mg/L	1		SM 2540C	Total/NA
Chloride	44		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.26		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	71		15		mg/L	3		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-02 — Lab Sample ID: 500-192075-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.076		0.0025		mg/L	1		6020A	Total Recoverable
Boron	0.66		0.050		mg/L	1		6020A	Total Recoverable
Calcium	100		0.20		mg/L	1		6020A	Total Recoverable
Molybdenum	0.0059		0.0050		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	430		10		mg/L	1		SM 2540C	Total/NA
Chloride	41		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.15		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	64		25		mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-03 — Lab Sample ID: 500-192075-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.086		0.0025		mg/L	1		6020A	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-03 (Continued) — Lab Sample ID: 500-192075-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.86		0.050		mg/L	1		6020A	Total Recoverable
Calcium	92		0.20		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	390		10		mg/L	1		SM 2540C	Total/NA
Chloride	45		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.28		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	60		15		mg/L	3		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-04 — Lab Sample ID: 500-192075-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.034		0.0025		mg/L	1		6020A	Total Recoverable
Boron	0.57		0.050		mg/L	1		6020A	Total Recoverable
Calcium	92		0.20		mg/L	1		6020A	Total Recoverable
Molybdenum	0.0076		0.0050		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	580		10		mg/L	1		SM 2540C	Total/NA
Chloride	88		10		mg/L	5		SM 4500 Cl- E	Total/NA
Fluoride	0.32		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	94		15		mg/L	3		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-05 — Lab Sample ID: 500-192075-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.050		0.0025		mg/L	1		6020A	Total Recoverable
Boron	0.53		0.050		mg/L	1		6020A	Total Recoverable
Calcium	98		0.20		mg/L	1		6020A	Total Recoverable
Molybdenum	0.0072		0.0050		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	670		10		mg/L	1		SM 2540C	Total/NA
Chloride	78		10		mg/L	5		SM 4500 Cl- E	Total/NA
Fluoride	0.31		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	110		25		mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: FAB DUP — Lab Sample ID: 500-192075-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0011		0.0010		mg/L	1		6020A	Total Recoverable
Barium	0.26		0.0025		mg/L	1		6020A	Total Recoverable
Boron	2.4		0.50		mg/L	10		6020A	Total Recoverable
Calcium	120		0.20		mg/L	1		6020A	Total Recoverable
Cobalt	0.0050		0.0010		mg/L	1		6020A	Total Recoverable
Lead	0.0013		0.00050		mg/L	1		6020A	Total Recoverable

This Detection Summary does not include radiochemical test results.

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

Job ID: 500-192075-1

Client Sample ID: FAB DUP (Continued)

Lab Sample ID: 500-192075-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.0030		0.0025		mg/L	1		6020A	Total Recoverable
Total Dissolved Solids	500		10		mg/L	1		SM 2540C	Total/NA
Chloride	43		2.0		mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.26		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	69		25		mg/L	5		SM 4500 SO4 E	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

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

Job ID: 500-192075-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CHI
6020A	Metals (ICP/MS)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
SM 4500 SO4 E	Sulfate, Total	SM	TAL CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI
7470A	Preparation, Mercury	SW846	TAL CHI

Protocol References:

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

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, 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: 500-192075-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-192075-1	MW-01	Water	12/07/20 12:57	12/08/20 10:05	
500-192075-2	MW-10	Water	12/08/20 13:13	12/10/20 10:20	
500-192075-3	MW-02	Water	12/09/20 08:22	12/10/20 10:20	
500-192075-4	MW-03	Water	12/09/20 09:18	12/10/20 10:20	
500-192075-5	MW-04	Water	12/09/20 10:14	12/10/20 10:20	
500-192075-6	MW-05	Water	12/09/20 11:23	12/10/20 10:20	
500-192075-7	FAB DUP	Water	12/08/20 00:00	12/10/20 10:20	

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

Job ID: 500-192075-1

Client Sample ID: MW-01

Date Collected: 12/07/20 12:57
Date Received: 12/08/20 10:05

Lab Sample ID: 500-192075-1

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010	^	0.010		mg/L		12/08/20 17:57	12/09/20 13:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/08/20 17:57	12/14/20 16:54	1
Barium	**0.058**		0.0025		mg/L		12/08/20 17:57	12/11/20 19:14	1
Boron	**0.59**		0.050		mg/L		12/08/20 17:57	12/15/20 16:00	1
Cadmium	<0.00050		0.00050		mg/L		12/08/20 17:57	12/11/20 19:14	1
Calcium	**100**		0.20		mg/L		12/08/20 17:57	12/11/20 19:14	1
Chromium	<0.0050		0.0050		mg/L		12/08/20 17:57	12/11/20 19:14	1
Cobalt	<0.0010		0.0010		mg/L		12/08/20 17:57	12/11/20 19:14	1
Lead	<0.00050		0.00050		mg/L		12/08/20 17:57	12/11/20 19:14	1
Molybdenum	**0.0052**		0.0050		mg/L		12/08/20 17:57	12/11/20 19:14	1
Selenium	<0.0025		0.0025		mg/L		12/08/20 17:57	12/14/20 16:54	1
Thallium	<0.0020		0.0020		mg/L		12/08/20 17:57	12/11/20 19:14	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		12/10/20 08:20	12/11/20 07:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**640**		10		mg/L			12/09/20 03:19	1
Chloride	**54**		2.0		mg/L			12/11/20 15:11	1
Fluoride	**0.25**		0.10		mg/L			12/16/20 15:08	1
Sulfate	**55**		25		mg/L			12/15/20 14:16	5

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

Job ID: 500-192075-1

Client Sample ID: MW-10

Date Collected: 12/08/20 13:13
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-2

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/11/20 07:38	12/14/20 12:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0015**		0.0010		mg/L		12/11/20 07:38	12/14/20 18:22	1
Barium	**0.28**		0.0025		mg/L		12/11/20 07:38	12/11/20 20:03	1
Boron	**2.4**		0.50		mg/L		12/11/20 07:38	12/15/20 16:32	10
Calcium	**120**		0.20		mg/L		12/11/20 07:38	12/11/20 20:03	1
Chromium	<0.0050		0.0050		mg/L		12/11/20 07:38	12/11/20 20:03	1
Cobalt	**0.0089**		0.0010		mg/L		12/11/20 07:38	12/11/20 20:03	1
Lead	**0.0023**		0.00050		mg/L		12/11/20 07:38	12/11/20 20:03	1
Molybdenum	<0.0050		0.0050		mg/L		12/11/20 07:38	12/11/20 20:03	1
Selenium	**0.0031**		0.0025		mg/L		12/11/20 07:38	12/14/20 18:22	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		12/15/20 09:35	12/16/20 10:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**550**		10		mg/L			12/14/20 01:31	1
Chloride	**44**		2.0		mg/L			12/12/20 12:50	1
Fluoride	**0.26**		0.10		mg/L			12/16/20 15:15	1
Sulfate	**71**		15		mg/L			12/15/20 14:11	3

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

Job ID: 500-192075-1

Client Sample ID: MW-02

Date Collected: 12/09/20 08:22
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-3

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/11/20 07:38	12/14/20 12:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/11/20 07:38	12/14/20 18:24	1
Barium	**0.076**		0.0025		mg/L		12/11/20 07:38	12/11/20 20:07	1
Boron	**0.66**		0.050		mg/L		12/11/20 07:38	12/15/20 16:36	1
Calcium	**100**		0.20		mg/L		12/11/20 07:38	12/11/20 20:07	1
Chromium	<0.0050		0.0050		mg/L		12/11/20 07:38	12/11/20 20:07	1
Cobalt	<0.0010		0.0010		mg/L		12/11/20 07:38	12/11/20 20:07	1
Lead	<0.00050		0.00050		mg/L		12/11/20 07:38	12/11/20 20:07	1
Molybdenum	**0.0059**		0.0050		mg/L		12/11/20 07:38	12/11/20 20:07	1
Selenium	<0.0025		0.0025		mg/L		12/11/20 07:38	12/14/20 18:24	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		12/15/20 09:35	12/16/20 10:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**430**		10		mg/L			12/14/20 01:39	1
Chloride	**41**		2.0		mg/L			12/12/20 12:51	1
Fluoride	**0.15**		0.10		mg/L			12/16/20 15:22	1
Sulfate	**64**		25		mg/L			12/15/20 14:18	5

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

Job ID: 500-192075-1

Client Sample ID: MW-03

Date Collected: 12/09/20 09:18
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-4

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/11/20 07:38	12/14/20 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/11/20 07:38	12/14/20 18:26	1
Barium	**0.086**		0.0025		mg/L		12/11/20 07:38	12/11/20 20:10	1
Boron	**0.86**		0.050		mg/L		12/11/20 07:38	12/15/20 16:40	1
Calcium	**92**		0.20		mg/L		12/11/20 07:38	12/11/20 20:10	1
Chromium	<0.0050		0.0050		mg/L		12/11/20 07:38	12/11/20 20:10	1
Cobalt	<0.0010		0.0010		mg/L		12/11/20 07:38	12/11/20 20:10	1
Lead	<0.00050		0.00050		mg/L		12/11/20 07:38	12/11/20 20:10	1
Molybdenum	<0.0050		0.0050		mg/L		12/11/20 07:38	12/11/20 20:10	1
Selenium	<0.0025		0.0025		mg/L		12/11/20 07:38	12/14/20 18:26	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		12/15/20 09:35	12/16/20 10:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**390**		10		mg/L			12/14/20 01:44	1
Chloride	**45**		2.0		mg/L			12/12/20 12:52	1
Fluoride	**0.28**		0.10		mg/L			12/16/20 15:25	1
Sulfate	**60**		15		mg/L			12/15/20 14:12	3

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

Job ID: 500-192075-1

Client Sample ID: MW-04

Date Collected: 12/09/20 10:14
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-5

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/11/20 07:38	12/14/20 12:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/11/20 07:38	12/14/20 18:32	1
Barium	**0.034**		0.0025		mg/L		12/11/20 07:38	12/11/20 20:21	1
Boron	**0.57**		0.050		mg/L		12/11/20 07:38	12/15/20 16:43	1
Calcium	**92**		0.20		mg/L		12/11/20 07:38	12/11/20 20:21	1
Chromium	<0.0050		0.0050		mg/L		12/11/20 07:38	12/11/20 20:21	1
Cobalt	<0.0010		0.0010		mg/L		12/11/20 07:38	12/11/20 20:21	1
Lead	<0.00050		0.00050		mg/L		12/11/20 07:38	12/11/20 20:21	1
Molybdenum	**0.0076**		0.0050		mg/L		12/11/20 07:38	12/11/20 20:21	1
Selenium	<0.0025		0.0025		mg/L		12/11/20 07:38	12/14/20 18:32	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		12/15/20 09:35	12/16/20 10:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**580**		10		mg/L			12/14/20 01:47	1
Chloride	**88**		10		mg/L			12/12/20 13:21	5
Fluoride	**0.32**		0.10		mg/L			12/16/20 15:29	1
Sulfate	**94**		15		mg/L			12/15/20 14:12	3

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

Job ID: 500-192075-1

Client Sample ID: MW-05

Date Collected: 12/09/20 11:23
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-6

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/11/20 07:38	12/14/20 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/11/20 07:38	12/14/20 18:33	1
Barium	**0.050**		0.0025		mg/L		12/11/20 07:38	12/11/20 20:24	1
Boron	**0.53**		0.050		mg/L		12/11/20 07:38	12/15/20 16:47	1
Calcium	**98**		0.20		mg/L		12/11/20 07:38	12/11/20 20:24	1
Chromium	<0.0050		0.0050		mg/L		12/11/20 07:38	12/11/20 20:24	1
Cobalt	<0.0010		0.0010		mg/L		12/11/20 07:38	12/11/20 20:24	1
Lead	<0.00050		0.00050		mg/L		12/11/20 07:38	12/11/20 20:24	1
Molybdenum	**0.0072**		0.0050		mg/L		12/11/20 07:38	12/11/20 20:24	1
Selenium	<0.0025		0.0025		mg/L		12/11/20 07:38	12/14/20 18:33	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		12/15/20 09:35	12/16/20 10:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**670**		10		mg/L			12/14/20 01:49	1
Chloride	**78**		10		mg/L			12/12/20 13:22	5
Fluoride	**0.31**		0.10		mg/L			12/16/20 15:35	1
Sulfate	**110**		25		mg/L			12/15/20 14:13	5

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

Job ID: 500-192075-1

Client Sample ID: FAB DUP

Date Collected: 12/08/20 00:00
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-7

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/11/20 07:38	12/14/20 12:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0011**		0.0010		mg/L		12/11/20 07:38	12/14/20 18:35	1
Barium	**0.26**		0.0025		mg/L		12/11/20 07:38	12/11/20 20:28	1
Boron	**2.4**		0.50		mg/L		12/11/20 07:38	12/15/20 16:50	10
Calcium	**120**		0.20		mg/L		12/11/20 07:38	12/11/20 20:28	1
Chromium	<0.0050		0.0050		mg/L		12/11/20 07:38	12/11/20 20:28	1
Cobalt	**0.0050**		0.0010		mg/L		12/11/20 07:38	12/11/20 20:28	1
Lead	**0.0013**		0.00050		mg/L		12/11/20 07:38	12/11/20 20:28	1
Molybdenum	<0.0050		0.0050		mg/L		12/11/20 07:38	12/11/20 20:28	1
Selenium	**0.0030**		0.0025		mg/L		12/11/20 07:38	12/14/20 18:35	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		12/15/20 09:35	12/16/20 10:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**500**		10		mg/L			12/14/20 01:52	1
Chloride	**43**		2.0		mg/L			12/12/20 12:56	1
Fluoride	**0.26**		0.10		mg/L			12/16/20 15:53	1
Sulfate	**69**		25		mg/L			12/15/20 14:13	5

Definitions/Glossary

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

Job ID: 500-192075-1

Qualifiers

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

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

Metals

Prep Batch: 575895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-1	MW-01	Total Recoverable	Water	3005A	
MB 500-575895/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-575895/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 576167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-1	MW-01	Total Recoverable	Water	6010C	575895
MB 500-575895/1-A	Method Blank	Total Recoverable	Water	6010C	575895
LCS 500-575895/2-A	Lab Control Sample	Total Recoverable	Water	6010C	575895

Prep Batch: 576172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-1	MW-01	Total/NA	Water	7470A	
MB 500-576172/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-576172/13-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 576343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-2	MW-10	Total Recoverable	Water	3005A	
500-192075-3	MW-02	Total Recoverable	Water	3005A	
500-192075-4	MW-03	Total Recoverable	Water	3005A	
500-192075-5	MW-04	Total Recoverable	Water	3005A	
500-192075-6	MW-05	Total Recoverable	Water	3005A	
500-192075-7	FAB DUP	Total Recoverable	Water	3005A	
MB 500-576343/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-576343/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 576405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-1	MW-01	Total/NA	Water	7470A	576172
MB 500-576172/12-A	Method Blank	Total/NA	Water	7470A	576172
LCS 500-576172/13-A	Lab Control Sample	Total/NA	Water	7470A	576172

Analysis Batch: 576644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-1	MW-01	Total Recoverable	Water	6020A	575895
500-192075-2	MW-10	Total Recoverable	Water	6020A	576343
500-192075-3	MW-02	Total Recoverable	Water	6020A	576343
500-192075-4	MW-03	Total Recoverable	Water	6020A	576343
500-192075-5	MW-04	Total Recoverable	Water	6020A	576343
500-192075-6	MW-05	Total Recoverable	Water	6020A	576343
500-192075-7	FAB DUP	Total Recoverable	Water	6020A	576343
MB 500-575895/1-A	Method Blank	Total Recoverable	Water	6020A	575895
MB 500-576343/1-A	Method Blank	Total Recoverable	Water	6020A	576343
LCS 500-575895/2-A	Lab Control Sample	Total Recoverable	Water	6020A	575895
LCS 500-576343/2-A	Lab Control Sample	Total Recoverable	Water	6020A	576343

Analysis Batch: 576826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-2	MW-10	Total Recoverable	Water	6010C	576343
500-192075-3	MW-02	Total Recoverable	Water	6010C	576343

Metals (Continued)

Analysis Batch: 576826 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-4	MW-03	Total Recoverable	Water	6010C	576343
500-192075-5	MW-04	Total Recoverable	Water	6010C	576343
500-192075-6	MW-05	Total Recoverable	Water	6010C	576343
500-192075-7	FAB DUP	Total Recoverable	Water	6010C	576343
MB 500-576343/1-A	Method Blank	Total Recoverable	Water	6010C	576343
LCS 500-576343/2-A	Lab Control Sample	Total Recoverable	Water	6010C	576343

Prep Batch: 576859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-2	MW-10	Total/NA	Water	7470A	
500-192075-3	MW-02	Total/NA	Water	7470A	
500-192075-4	MW-03	Total/NA	Water	7470A	
500-192075-5	MW-04	Total/NA	Water	7470A	
500-192075-6	MW-05	Total/NA	Water	7470A	
500-192075-7	FAB DUP	Total/NA	Water	7470A	
MB 500-576859/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-576859/13-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 576866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-1	MW-01	Total Recoverable	Water	6020A	575895
500-192075-2	MW-10	Total Recoverable	Water	6020A	576343
500-192075-3	MW-02	Total Recoverable	Water	6020A	576343
500-192075-4	MW-03	Total Recoverable	Water	6020A	576343
500-192075-5	MW-04	Total Recoverable	Water	6020A	576343
500-192075-6	MW-05	Total Recoverable	Water	6020A	576343
500-192075-7	FAB DUP	Total Recoverable	Water	6020A	576343
MB 500-575895/1-A	Method Blank	Total Recoverable	Water	6020A	575895
MB 500-576343/1-A	Method Blank	Total Recoverable	Water	6020A	576343
LCS 500-575895/2-A	Lab Control Sample	Total Recoverable	Water	6020A	575895
LCS 500-576343/2-A	Lab Control Sample	Total Recoverable	Water	6020A	576343

Analysis Batch: 577089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-1	MW-01	Total Recoverable	Water	6020A	575895
500-192075-2	MW-10	Total Recoverable	Water	6020A	576343
500-192075-3	MW-02	Total Recoverable	Water	6020A	576343
500-192075-4	MW-03	Total Recoverable	Water	6020A	576343
500-192075-5	MW-04	Total Recoverable	Water	6020A	576343
500-192075-6	MW-05	Total Recoverable	Water	6020A	576343
500-192075-7	FAB DUP	Total Recoverable	Water	6020A	576343
MB 500-575895/1-A	Method Blank	Total Recoverable	Water	6020A	575895
MB 500-576343/1-A	Method Blank	Total Recoverable	Water	6020A	576343
LCS 500-575895/2-A	Lab Control Sample	Total Recoverable	Water	6020A	575895
LCS 500-576343/2-A	Lab Control Sample	Total Recoverable	Water	6020A	576343

Analysis Batch: 577102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-2	MW-10	Total/NA	Water	7470A	576859
500-192075-3	MW-02	Total/NA	Water	7470A	576859
500-192075-4	MW-03	Total/NA	Water	7470A	576859

Metals (Continued)

Analysis Batch: 577102 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-5	MW-04	Total/NA	Water	7470A	576859
500-192075-6	MW-05	Total/NA	Water	7470A	576859
500-192075-7	FAB DUP	Total/NA	Water	7470A	576859
MB 500-576859/12-A	Method Blank	Total/NA	Water	7470A	576859
LCS 500-576859/13-A	Lab Control Sample	Total/NA	Water	7470A	576859

General Chemistry

Analysis Batch: 575962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-1	MW-01	Total/NA	Water	SM 2540C	
MB 500-575962/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-575962/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 576457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-1	MW-01	Total/NA	Water	SM 4500 Cl- E	
MB 500-576457/12	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-576457/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 576529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-2	MW-10	Total/NA	Water	SM 4500 Cl- E	
500-192075-3	MW-02	Total/NA	Water	SM 4500 Cl- E	
500-192075-4	MW-03	Total/NA	Water	SM 4500 Cl- E	
500-192075-5	MW-04	Total/NA	Water	SM 4500 Cl- E	
500-192075-6	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-192075-7	FAB DUP	Total/NA	Water	SM 4500 Cl- E	
MB 500-576529/12	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-576529/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-192075-6 MS	MW-05	Total/NA	Water	SM 4500 Cl- E	
500-192075-6 MSD	MW-05	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 576566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-2	MW-10	Total/NA	Water	SM 2540C	
500-192075-3	MW-02	Total/NA	Water	SM 2540C	
500-192075-4	MW-03	Total/NA	Water	SM 2540C	
500-192075-5	MW-04	Total/NA	Water	SM 2540C	
500-192075-6	MW-05	Total/NA	Water	SM 2540C	
500-192075-7	FAB DUP	Total/NA	Water	SM 2540C	
MB 500-576566/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-576566/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-192075-2 MS	MW-10	Total/NA	Water	SM 2540C	
500-192075-2 DU	MW-10	Total/NA	Water	SM 2540C	
500-192075-3 DU	MW-02	Total/NA	Water	SM 2540C	

Analysis Batch: 576921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-1	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-192075-2	MW-10	Total/NA	Water	SM 4500 SO4 E	

General Chemistry (Continued)

Analysis Batch: 576921 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-3	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-192075-4	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-192075-5	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-192075-6	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-192075-7	FAB DUP	Total/NA	Water	SM 4500 SO4 E	
MB 500-576921/15	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-576921/16	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 577245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-1	MW-01	Total/NA	Water	SM 4500 F C	
500-192075-2	MW-10	Total/NA	Water	SM 4500 F C	
500-192075-3	MW-02	Total/NA	Water	SM 4500 F C	
500-192075-4	MW-03	Total/NA	Water	SM 4500 F C	
500-192075-5	MW-04	Total/NA	Water	SM 4500 F C	
500-192075-6	MW-05	Total/NA	Water	SM 4500 F C	
500-192075-7	FAB DUP	Total/NA	Water	SM 4500 F C	
MB 500-577245/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-577245/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-575895/1-A
Matrix: Water
Analysis Batch: 576167

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 575895

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010	^	0.010		mg/L		12/08/20 17:57	12/09/20 12:33	1

Lab Sample ID: LCS 500-575895/2-A
Matrix: Water
Analysis Batch: 576167

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 575895

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.506	^	mg/L		101	80 - 120

Lab Sample ID: MB 500-576343/1-A
Matrix: Water
Analysis Batch: 576826

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576343

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		12/11/20 07:38	12/14/20 11:54	1

Lab Sample ID: LCS 500-576343/2-A
Matrix: Water
Analysis Batch: 576826

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576343

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.500	0.513		mg/L		103	80 - 120

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-575895/1-A
Matrix: Water
Analysis Batch: 576644

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 575895

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0025		0.0025		mg/L		12/08/20 17:57	12/11/20 18:29	1
Cadmium	<0.00050		0.00050		mg/L		12/08/20 17:57	12/11/20 18:29	1
Calcium	<0.20		0.20		mg/L		12/08/20 17:57	12/11/20 18:29	1
Chromium	<0.0050		0.0050		mg/L		12/08/20 17:57	12/11/20 18:29	1
Cobalt	<0.0010		0.0010		mg/L		12/08/20 17:57	12/11/20 18:29	1
Lead	<0.00050		0.00050		mg/L		12/08/20 17:57	12/11/20 18:29	1
Molybdenum	<0.0050		0.0050		mg/L		12/08/20 17:57	12/11/20 18:29	1
Thallium	<0.0020		0.0020		mg/L		12/08/20 17:57	12/11/20 18:29	1

Lab Sample ID: MB 500-575895/1-A
Matrix: Water
Analysis Batch: 576866

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 575895

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/08/20 17:57	12/14/20 16:27	1
Barium	<0.0025		0.0025		mg/L		12/08/20 17:57	12/14/20 16:27	1
Calcium	<0.20		0.20		mg/L		12/08/20 17:57	12/14/20 16:27	1
Selenium	<0.0025		0.0025		mg/L		12/08/20 17:57	12/14/20 16:27	1

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

Lab Sample ID: MB 500-575895/1-A
Matrix: Water
Analysis Batch: 577089

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 575895

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		12/08/20 17:57	12/15/20 15:13	1

Lab Sample ID: LCS 500-575895/2-A
Matrix: Water
Analysis Batch: 576644

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 575895

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	2.00	2.05		mg/L		103	80 - 120
Cadmium	0.0500	0.0489		mg/L		98	80 - 120
Calcium	10.0	10.3		mg/L		103	80 - 120
Chromium	0.200	0.200		mg/L		100	80 - 120
Cobalt	0.500	0.488		mg/L		98	80 - 120
Lead	0.100	0.101		mg/L		101	80 - 120
Molybdenum	1.00	0.992		mg/L		99	80 - 120
Thallium	0.100	0.109		mg/L		109	80 - 120

Lab Sample ID: LCS 500-575895/2-A
Matrix: Water
Analysis Batch: 576866

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 575895

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0998		mg/L		100	80 - 120
Barium	2.00	1.62		mg/L		81	80 - 120
Calcium	10.0	11.9		mg/L		119	80 - 120
Selenium	0.100	0.0971		mg/L		97	80 - 120

Lab Sample ID: LCS 500-575895/2-A
Matrix: Water
Analysis Batch: 577089

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 575895

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	1.07		mg/L		107	80 - 120

Lab Sample ID: MB 500-576343/1-A
Matrix: Water
Analysis Batch: 576644

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576343

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0025		0.0025		mg/L		12/11/20 07:38	12/11/20 19:39	1
Calcium	<0.20		0.20		mg/L		12/11/20 07:38	12/11/20 19:39	1
Chromium	<0.0050		0.0050		mg/L		12/11/20 07:38	12/11/20 19:39	1
Cobalt	<0.0010		0.0010		mg/L		12/11/20 07:38	12/11/20 19:39	1
Lead	<0.00050		0.00050		mg/L		12/11/20 07:38	12/11/20 19:39	1
Molybdenum	<0.0050		0.0050		mg/L		12/11/20 07:38	12/11/20 19:39	1

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

Lab Sample ID: MB 500-576343/1-A
Matrix: Water
Analysis Batch: 576866

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576343

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		12/11/20 07:38	12/14/20 18:09	1
Selenium	<0.0025		0.0025		mg/L		12/11/20 07:38	12/14/20 18:09	1

Lab Sample ID: MB 500-576343/1-A
Matrix: Water
Analysis Batch: 577089

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576343

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		12/11/20 07:38	12/15/20 16:25	1

Lab Sample ID: LCS 500-576343/2-A
Matrix: Water
Analysis Batch: 576644

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576343

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	2.00	2.15		mg/L		107	80 - 120
Calcium	10.0	10.3		mg/L		103	80 - 120
Chromium	0.200	0.195		mg/L		98	80 - 120
Cobalt	0.500	0.480		mg/L		96	80 - 120
Lead	0.100	0.101		mg/L		101	80 - 120
Molybdenum	1.00	0.996		mg/L		100	80 - 120

Lab Sample ID: LCS 500-576343/2-A
Matrix: Water
Analysis Batch: 576866

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576343

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0939		mg/L		94	80 - 120
Selenium	0.100	0.0934		mg/L		93	80 - 120

Lab Sample ID: LCS 500-576343/2-A
Matrix: Water
Analysis Batch: 577089

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576343

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.00	1.05		mg/L		105	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-576172/12-A
Matrix: Water
Analysis Batch: 576405

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 576172

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		12/10/20 08:20	12/11/20 06:54	1

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

Lab Sample ID: LCS 500-576172/13-A
Matrix: Water
Analysis Batch: 576405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 576172

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

Lab Sample ID: MB 500-576859/12-A
Matrix: Water
Analysis Batch: 577102

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 576859

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		12/15/20 09:35	12/16/20 09:38	1

Lab Sample ID: LCS 500-576859/13-A
Matrix: Water
Analysis Batch: 577102

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 576859

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00188		mg/L		94	80 - 120

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

Lab Sample ID: MB 500-575962/1
Matrix: Water
Analysis Batch: 575962

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			12/09/20 02:42	1

Lab Sample ID: LCS 500-575962/2
Matrix: Water
Analysis Batch: 575962

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	236		mg/L		94	80 - 120

Lab Sample ID: MB 500-576566/1
Matrix: Water
Analysis Batch: 576566

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			12/14/20 01:16	1

Lab Sample ID: LCS 500-576566/2
Matrix: Water
Analysis Batch: 576566

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	224		mg/L		90	80 - 120

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

Lab Sample ID: 500-192075-2 MS
Matrix: Water
Analysis Batch: 576566

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		
Total Dissolved Solids	550		250	758		mg/L		83	75 - 125		

Lab Sample ID: 500-192075-2 DU
Matrix: Water
Analysis Batch: 576566

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

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	550			534		mg/L				3	5

Lab Sample ID: 500-192075-3 DU
Matrix: Water
Analysis Batch: 576566

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

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	430			424		mg/L				2	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-576457/12
Matrix: Water
Analysis Batch: 576457

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			12/11/20 14:56	1

Lab Sample ID: LCS 500-576457/13
Matrix: Water
Analysis Batch: 576457

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			50.0	50.4		mg/L		101	85 - 115		

Lab Sample ID: MB 500-576529/12
Matrix: Water
Analysis Batch: 576529

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			12/12/20 12:38	1

Lab Sample ID: LCS 500-576529/13
Matrix: Water
Analysis Batch: 576529

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			50.0	47.5		mg/L		95	85 - 115		

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

Lab Sample ID: 500-192075-6 MS
Matrix: Water
Analysis Batch: 576529

Client Sample ID: MW-05
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	78		50.0	124		mg/L		93	75 - 125		

Lab Sample ID: 500-192075-6 MSD
Matrix: Water
Analysis Batch: 576529

Client Sample ID: MW-05
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	78		50.0	121		mg/L		86	75 - 125	3	20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-577245/3
Matrix: Water
Analysis Batch: 577245

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10		mg/L			12/16/20 13:49	1

Lab Sample ID: LCS 500-577245/4
Matrix: Water
Analysis Batch: 577245

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	10.9		mg/L		109	80 - 120		

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-576921/15
Matrix: Water
Analysis Batch: 576921

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			12/15/20 14:06	1

Lab Sample ID: LCS 500-576921/16
Matrix: Water
Analysis Batch: 576921

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	80 - 120		

Lab Chronicle

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

Job ID: 500-192075-1

Client Sample ID: MW-01

Date Collected: 12/07/20 12:57
Date Received: 12/08/20 10:05

Lab Sample ID: 500-192075-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			575895	12/08/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	576167	12/09/20 13:16	EEN	TAL CHI
Total Recoverable	Prep	3005A			575895	12/08/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	576866	12/14/20 16:54	FXG	TAL CHI
Total Recoverable	Prep	3005A			575895	12/08/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	576644	12/11/20 19:14	FXG	TAL CHI
Total Recoverable	Prep	3005A			575895	12/08/20 17:57	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	577089	12/15/20 16:00	FXG	TAL CHI
Total/NA	Prep	7470A			576172	12/10/20 08:20	MJG	TAL CHI
Total/NA	Analysis	7470A		1	576405	12/11/20 07:07	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	575962	12/09/20 03:19	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	576457	12/11/20 15:11	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	577245	12/16/20 15:08	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	576921	12/15/20 14:16	MS	TAL CHI

Client Sample ID: MW-10

Date Collected: 12/08/20 13:13
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	576826	12/14/20 12:07	EEN	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576866	12/14/20 18:22	FXG	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576644	12/11/20 20:03	FXG	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		10	577089	12/15/20 16:32	FXG	TAL CHI
Total/NA	Prep	7470A			576859	12/15/20 09:35	MJG	TAL CHI
Total/NA	Analysis	7470A		1	577102	12/16/20 10:21	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	576566	12/14/20 01:31	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	576529	12/12/20 12:50	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	577245	12/16/20 15:15	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		3	576921	12/15/20 14:11	MS	TAL CHI

Client Sample ID: MW-02

Date Collected: 12/09/20 08:22
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	576826	12/14/20 12:10	EEN	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576866	12/14/20 18:24	FXG	TAL CHI

Client Sample ID: MW-02

Lab Sample ID: 500-192075-3

Date Collected: 12/09/20 08:22

Matrix: Water

Date Received: 12/10/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576644	12/11/20 20:07	FXG	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	577089	12/15/20 16:36	FXG	TAL CHI
Total/NA	Prep	7470A			576859	12/15/20 09:35	MJG	TAL CHI
Total/NA	Analysis	7470A		1	577102	12/16/20 10:23	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	576566	12/14/20 01:39	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	576529	12/12/20 12:51	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	577245	12/16/20 15:22	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	576921	12/15/20 14:18	MS	TAL CHI

Client Sample ID: MW-03

Lab Sample ID: 500-192075-4

Date Collected: 12/09/20 09:18

Matrix: Water

Date Received: 12/10/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	576826	12/14/20 12:14	EEN	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576866	12/14/20 18:26	FXG	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576644	12/11/20 20:10	FXG	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	577089	12/15/20 16:40	FXG	TAL CHI
Total/NA	Prep	7470A			576859	12/15/20 09:35	MJG	TAL CHI
Total/NA	Analysis	7470A		1	577102	12/16/20 10:48	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	576566	12/14/20 01:44	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	576529	12/12/20 12:52	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	577245	12/16/20 15:25	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		3	576921	12/15/20 14:12	MS	TAL CHI

Client Sample ID: MW-04

Lab Sample ID: 500-192075-5

Date Collected: 12/09/20 10:14

Matrix: Water

Date Received: 12/10/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	576826	12/14/20 12:17	EEN	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576866	12/14/20 18:32	FXG	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576644	12/11/20 20:21	FXG	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	577089	12/15/20 16:43	FXG	TAL CHI

Lab Chronicle

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

Job ID: 500-192075-1

Client Sample ID: MW-04

Lab Sample ID: 500-192075-5

Date Collected: 12/09/20 10:14

Matrix: Water

Date Received: 12/10/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			576859	12/15/20 09:35	MJG	TAL CHI
Total/NA	Analysis	7470A		1	577102	12/16/20 10:50	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	576566	12/14/20 01:47	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	576529	12/12/20 13:21	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	577245	12/16/20 15:29	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		3	576921	12/15/20 14:12	MS	TAL CHI

Client Sample ID: MW-05

Lab Sample ID: 500-192075-6

Date Collected: 12/09/20 11:23

Matrix: Water

Date Received: 12/10/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	576826	12/14/20 12:20	EEN	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576866	12/14/20 18:33	FXG	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576644	12/11/20 20:24	FXG	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	577089	12/15/20 16:47	FXG	TAL CHI
Total/NA	Prep	7470A			576859	12/15/20 09:35	MJG	TAL CHI
Total/NA	Analysis	7470A		1	577102	12/16/20 10:53	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	576566	12/14/20 01:49	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	576529	12/12/20 13:22	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	577245	12/16/20 15:35	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	576921	12/15/20 14:13	MS	TAL CHI

Client Sample ID: FAB DUP

Lab Sample ID: 500-192075-7

Date Collected: 12/08/20 00:00

Matrix: Water

Date Received: 12/10/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6010C		1	576826	12/14/20 12:23	EEN	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576866	12/14/20 18:35	FXG	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		1	576644	12/11/20 20:28	FXG	TAL CHI
Total Recoverable	Prep	3005A			576343	12/11/20 07:38	LMN	TAL CHI
Total Recoverable	Analysis	6020A		10	577089	12/15/20 16:50	FXG	TAL CHI
Total/NA	Prep	7470A			576859	12/15/20 09:35	MJG	TAL CHI
Total/NA	Analysis	7470A		1	577102	12/16/20 10:55	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	576566	12/14/20 01:52	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	576529	12/12/20 12:56	EAT	TAL CHI

Lab Chronicle

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

Job ID: 500-192075-1

Client Sample ID: FAB DUP

Date Collected: 12/08/20 00:00
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	577245	12/16/20 15:53	MS	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	576921	12/15/20 14:13	MS	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, 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: 500-192075-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-29-21

TestAmerica Chicago
2417 Bond Street

University Park, IL 60484-3101
phone 708.534.5200 fax 708.534.5211

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Rich Gnat	Site Contact: Mitchel Dolan	Date: 12/7/20	COC No:
KPRG and Associates, Inc.	Tel/Fax: (262) 781-0475	Lab Contact: Diana Mockler	Carrier: FedEx	____ of ____ COCs
14665 West Lisbon Road, Suite 1A	**Analysis Turnaround Time**			Sampler:
Brookfield, WI 53154	☐ CALENDAR DAYS ☐ WORKING DAYS			**For Lab Use Only:**
(262) 781-0475 Phone	TAT if different from Below ____			Walk-in Client:
(262) 781-0478 FAX	☐ 2 weeks			Lab Sampling:
Project Name: Powerton CCR FAB	☒ 1 week			
Site: Powerton Station - Pekin, IL	☐ 2 days			Job / SDG No.: 500-192075
P O # 12313.1	☐ 1 day			

500-192075 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	903.0, 904.0	6010C, 6020A, 7470A	2540C, 4500_F_C, SM4500_Cl_E, SM4500_SO4_E	SM4500_SO4_E Local Method	Sample Specific Notes:
MW-01	12/7	1257	G	W	7	N	N	X	X	X	X	
								4	4	1	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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 & Comments: Lab Project #50011612. Appendix III Parameters and Custom Appendix IV FAB Metals; As, Ba, Cr, Co, Pb, Mo, Se

-0.1, 0.3

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: ____ Corr'd: ____	Therm ID No.: ____

Relinquished by: **Mitchel Dolan** MMD	Company: **KPRG**	Date/Time: 12/7/20/1600	Received by: **FedEx**	Company:	Date/Time: 12/7/20 / 1600
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Shin Scott	Company: TA-CHI	Date/Time: 12/8/20 1005

Form No. CA-C-WI-002, Rev. 4.18, dated 9/5/2018

TestAmerica Chicago
2417 Bond Street

University Park, IL 60484-3101
phone 708.534.5200 fax 708.534.5211

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Rich Gnat	Site Contact: Mitchel Dolan	Date: 12/9/20	COC No:
KPRG and Associates, Inc.	Tel/Fax: (262) 781-0475	Lab Contact: Diana Mockler	Carrier: FedEx	_____ of _____ COCs
14665 West Lisbon Road, Suite 1A	Analysis Turnaround Time			Sampler:
Brookfield, WI 53154	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
(262) 781-0475 Phone	TAT if different from Below _____			Walk-in Client:
(262) 781-0478 FAX	☐ 2 weeks			Lab Sampling:
Project Name: Powerton CCR FAB	☒ 1 week			
Site: Powerton Station - Pekin, IL	☐ 2 days			Job / SDG No.:
P O # 12313.1	☐ 1 day			500-192075

500-192075 COC

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	903.0, 904.0	6010C, 6020A, 7470A	2540C, 4500_F_C; SM4500_Cl_E; SM4500_SO4_E	SM4500_SO4_E Local Method	Sample Specific Notes:
2	MW-10	12/8	1313	G	W	7	N	N	X	X	X	X	
3	MW-02	12/4	0822	↓	↓	↓			↓	↓	↓	↓	
4	MW-03	12/9	0918										
5	MW-04	12/9	1014										
6	MW-05	12/9	1123										
7	FAB DUP	12/8	—										
									4	4	1	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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 & Comments: Lab Project #50011612. Appendix III Parameters and Custom Appendix IV FAB Metals; As, Ba, Cr, Co, Pb, Mo, Se

-1.1, -2.3

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:_____ Corr'd:_____		Therm ID No.:_____
Relinquished by: **Mitchel Dolan**	Company: **KPRG**	Date/Time: 12/9/20 1600	Received by: **FedEx**	Company:	Date/Time: 12/9/2020 1600
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TAL-CHI	Date/Time: 12/10/20 1020

Form No. CA-C-WI-002, Rev. 4.18, dated 9/5/2018

500-192075 Wayb

ORIGIN ID:PIAA (262) 622-1143
MITCHEL DOLAN

414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 07DEC20
ACTWGT: 58.00 LB
CAD: 6994780/SSFE2121
DIMS: 23x13x13 IN

BILL THIRD PARTY

TO TEST AMERICA
TEST AMERICA
2417 BOND ST

UNIVERSITY PARK IL 60484

(000) 000-0000 REF:
INV:
PO: DEPT:

Part # 156297-495 REV# EXP 07/21

FedEx Express

TRK# 0201 7810 2858 7674

TUE - 08 DEC 4:30P
STANDARD OVERNIGHT

XH JOTA

48qt

60484
IL-US ORD

ORIGIN ID:PIAA (262) 622-1143
MITCHEL DOLAN

414 PLAZA DR STE

WESTMONT, IL 605
UNITED STATES

SHIP DATE: 07DEC20
ACTWGT: 56.05 LB
CAD: 6994780/SSFE2121
DIMS: 23x13x13 IN

BILL THIRD PARTY

TO TEST AM
TEST A
2417 BOND

UNIVERSITY PARK

519
29
5
16:30
A
2122
12.08

(000) 000-0000 REF:
INV:
PO: DEPT:

Part # 156297-495 REV# EXP 07/21

FedEx Express

TRK# 0201 7810 2849 2122

TUE - 08 DEC 4:30P
STANDARD OVERNIGHT

XH JOTA

48qt

60484
IL-US ORD

ORIGIN ID:PIAA (000) 000-0000
TEST AMERICA

414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 09DEC20
ACTWGT: 53.10 LB
CAD: 6994780/SSFE2121
DIMS: 24x18x12 IN

BILL THIRD PARTY

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

UNIVERSITY PARK IL 60484

(708) 534-5200 REF:
INV:
PO: DEPT:

500-192075 Wayb

FedEx Express

4 of 5

MPS# 0263 **7811 5518 6684**

Mstr# 7811 5518 6651

0201

THU - 10 DEC 4:30P
STANDARD OVERNIGHT

XH JOTA

48qt

IL-US **60484** **ORD**

ORIGIN ID:PIAA (000) 000-0000
TEST AMERICA

414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 09DEC20
ACTWGT: 53.10 LB
CAD: 6994780/SSFE2121
DIMS: 24x18x12 IN

BILL THIRD PARTY

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

UNIVERSITY PARK IL 60484

(708) 534-5200 REF:
INV:
PO: DEPT:

FedEx Express

5 of 5

MPS# 0263 **7811 5518 6695**

Mstr# 7811 5518 6651

0201

THU - 10 DEC 4:30P
STANDARD OVERNIGHT

XH JOTA

48qt

IL-US **60484** **ORD**

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-192075-1

Login Number: 192075
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	-0.1,0.3 samples not frozen,-1.1,-2.3
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	

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 500-192075-2
Client Project/Site: Powerton CCR FAB

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

Attn: Richard Gnat

Diana Mockler

Authorized for release by:
1/19/2021 8:10:10 AM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Job ID: 500-192075-2

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-192075-2

Comments
No additional comments.

Receipt
The samples were received on 12/8/2020 10:05 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were -2.3º C, -1.1º C, -0.1º C and 0.3º C.

Receipt Exceptions

RAD
Methods 903.0, 9315: 903 prep batch 491936
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 (500-192075-2), MW-02 (500-192075-3), MW-03 (500-192075-4), MW-04 (500-192075-5), MW-05 (500-192075-6), FAB DUP (500-192075-7), (LCS 160-491936/1-A), (MB 160-491936/23-A) and (500-192075-G-2-A DU)

Methods 903.0, 9315: Radium-226 prep batch 160-491410:

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 (500-192075-1), (LCS 160-491410/1-A), (MB 160-491410/21-A), (500-192070-E-1-A) and (500-192070-G-1-A DU)

Methods 904.0, 9320: 904 Prep batch 491940
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 (500-192075-2), MW-02 (500-192075-3), MW-03 (500-192075-4), MW-04 (500-192075-5), MW-05 (500-192075-6), FAB DUP (500-192075-7), (LCS 160-491940/1-A), (MB 160-491940/23-A) and (500-192075-G-2-B DU)

Methods 904.0, 9320: 904/9320 prep batch 491413
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 (500-192075-1), (LCS 160-491413/1-A), (MB 160-491413/21-A), (500-192070-E-1-B) and (500-192070-G-1-B DU)

Method PrecSep_0: Radium 228 Prep Batch 160-491940:
The following samples were prepared at a reduced aliquot due to a cloudy appearance: FAB DUP (500-192075-7).

Method PrecSep_0: Radium 228 Prep Batch 160-491940:
The following samples were prepared at a reduced aliquot due to brown discoloration and a cloudy appearance: MW-10 (500-192075-2) and (500-192075-G-2 DU).

Job ID: 500-192075-2 (Continued)

Laboratory: Eurofins TestAmerica, Chicago (Continued)

Method PrecSep-21: Radium 226 Prep Batch 160-491936:
The following samples were prepared at a reduced aliquot due to a cloudy appearance: FAB DUP (500-192075-7).

Method PrecSep-21: Radium 226 Prep Batch 160-491936:
The following samples were prepared at a reduced aliquot due to brown discoloration and a cloudy appearance: MW-10 (500-192075-2) and (500-192075-G-2 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

Job ID: 500-192075-2

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

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

TAL SL = Eurofins TestAmerica, 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: 500-192075-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-192075-1	MW-01	Water	12/07/20 12:57	12/08/20 10:05	
500-192075-2	MW-10	Water	12/08/20 13:13	12/10/20 10:20	
500-192075-3	MW-02	Water	12/09/20 08:22	12/10/20 10:20	
500-192075-4	MW-03	Water	12/09/20 09:18	12/10/20 10:20	
500-192075-5	MW-04	Water	12/09/20 10:14	12/10/20 10:20	
500-192075-6	MW-05	Water	12/09/20 11:23	12/10/20 10:20	
500-192075-7	FAB DUP	Water	12/08/20 00:00	12/10/20 10:20	

Client Sample ID: MW-01

Date Collected: 12/07/20 12:57
Date Received: 12/08/20 10:05

Lab Sample ID: 500-192075-1

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0656	U	0.215	0.215	1.00	0.458	pCi/L	12/10/20 13:06	01/15/21 14:43	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*71.1*		*40 - 110*	*12/10/20 13:06*	*01/15/21 14:43*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0116	U	0.304	0.304	1.00	0.542	pCi/L	12/10/20 13:42	01/15/21 08:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*71.1*		*40 - 110*	*12/10/20 13:42*	*01/15/21 08:34*	*1*
Y Carrier	*84.9*		*40 - 110*	*12/10/20 13:42*	*01/15/21 08:34*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0540	U	0.372	0.372	5.00	0.542	pCi/L		01/18/21 20:59	1

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

Job ID: 500-192075-2

Client Sample ID: MW-10

Date Collected: 12/08/20 13:13
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-2

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.751		0.426	0.431	1.00	0.525	pCi/L	12/15/20 13:25	01/08/21 16:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.7*		*40 - 110*	*12/15/20 13:25*	*01/08/21 16:56*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.01		0.588	0.595	1.00	0.901	pCi/L	12/15/20 14:03	01/08/21 09:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.7*		*40 - 110*	*12/15/20 14:03*	*01/08/21 09:10*	*1*
Y Carrier	*94.6*		*40 - 110*	*12/15/20 14:03*	*01/08/21 09:10*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.76		0.726	0.735	5.00	0.901	pCi/L		01/15/21 21:49	1

Client Sample Results

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

Job ID: 500-192075-2

Client Sample ID: MW-02

Date Collected: 12/09/20 08:22
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-3

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0754	U	0.126	0.126	1.00	0.313	pCi/L	12/15/20 13:25	01/08/21 16:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.6*		*40 - 110*	*12/15/20 13:25*	*01/08/21 16:57*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.00755	U	0.264	0.264	1.00	0.471	pCi/L	12/15/20 14:03	01/08/21 09:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.6*		*40 - 110*	*12/15/20 14:03*	*01/08/21 09:11*	*1*
Y Carrier	*90.5*		*40 - 110*	*12/15/20 14:03*	*01/08/21 09:11*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0679	U	0.293	0.293	5.00	0.471	pCi/L		01/15/21 21:49	1

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

Job ID: 500-192075-2

Client Sample ID: MW-03

Date Collected: 12/09/20 09:18
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-4

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.111	U	0.168	0.168	1.00	0.290	pCi/L	12/15/20 13:25	01/08/21 16:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.1*		*40 - 110*	*12/15/20 13:25*	*01/08/21 16:57*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.133	U	0.227	0.227	1.00	0.432	pCi/L	12/15/20 14:03	01/08/21 09:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.1*		*40 - 110*	*12/15/20 14:03*	*01/08/21 09:11*	*1*
Y Carrier	*92.3*		*40 - 110*	*12/15/20 14:03*	*01/08/21 09:11*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0222	U	0.282	0.282	5.00	0.432	pCi/L		01/15/21 21:49	1

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

Job ID: 500-192075-2

Client Sample ID: MW-04

Date Collected: 12/09/20 10:14
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-5

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.292	U	0.251	0.252	1.00	0.383	pCi/L	12/15/20 13:25	01/08/21 16:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.0*		*40 - 110*	*12/15/20 13:25*	*01/08/21 16:57*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0842	U	0.237	0.238	1.00	0.411	pCi/L	12/15/20 14:03	01/08/21 09:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.0*		*40 - 110*	*12/15/20 14:03*	*01/08/21 09:02*	*1*
Y Carrier	*102*		*40 - 110*	*12/15/20 14:03*	*01/08/21 09:02*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.376	U	0.345	0.347	5.00	0.411	pCi/L		01/15/21 21:49	1

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

Job ID: 500-192075-2

Client Sample ID: MW-05

Date Collected: 12/09/20 11:23
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-6

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.145	U	0.192	0.192	1.00	0.321	pCi/L	12/15/20 13:25	01/08/21 16:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.3*		*40 - 110*	*12/15/20 13:25*	*01/08/21 16:58*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.424**		0.248	0.252	1.00	0.375	pCi/L	12/15/20 14:03	01/08/21 09:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.3*		*40 - 110*	*12/15/20 14:03*	*01/08/21 09:03*	*1*
Y Carrier	*104*		*40 - 110*	*12/15/20 14:03*	*01/08/21 09:03*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.569**		0.314	0.317	5.00	0.375	pCi/L		01/15/21 21:49	1

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

Job ID: 500-192075-2

Client Sample ID: FAB DUP

Date Collected: 12/08/20 00:00
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-7

Matrix: Water

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.158	U	0.222	0.222	1.00	0.376	pCi/L	12/15/20 13:25	01/08/21 16:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.7*		*40 - 110*	*12/15/20 13:25*	*01/08/21 16:58*	*1*

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.269	U	0.278	0.279	1.00	0.453	pCi/L	12/15/20 14:03	01/08/21 09:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.7*		*40 - 110*	*12/15/20 14:03*	*01/08/21 09:03*	*1*
Y Carrier	*101*		*40 - 110*	*12/15/20 14:03*	*01/08/21 09:03*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.428	U	0.356	0.357	5.00	0.453	pCi/L		01/15/21 21:49	1

Definitions/Glossary

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

Job ID: 500-192075-2

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.
¤	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

Rad

Prep Batch: 491410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-1	MW-01	Total/NA	Water	PrecSep-21	
MB 160-491410/21-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-491410/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 491413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-1	MW-01	Total/NA	Water	PrecSep_0	
MB 160-491413/21-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-491413/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 491936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-2	MW-10	Total/NA	Water	PrecSep-21	
500-192075-3	MW-02	Total/NA	Water	PrecSep-21	
500-192075-4	MW-03	Total/NA	Water	PrecSep-21	
500-192075-5	MW-04	Total/NA	Water	PrecSep-21	
500-192075-6	MW-05	Total/NA	Water	PrecSep-21	
500-192075-7	FAB DUP	Total/NA	Water	PrecSep-21	
MB 160-491936/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-491936/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-192075-2 DU	MW-10	Total/NA	Water	PrecSep-21	

Prep Batch: 491940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-192075-2	MW-10	Total/NA	Water	PrecSep_0	
500-192075-3	MW-02	Total/NA	Water	PrecSep_0	
500-192075-4	MW-03	Total/NA	Water	PrecSep_0	
500-192075-5	MW-04	Total/NA	Water	PrecSep_0	
500-192075-6	MW-05	Total/NA	Water	PrecSep_0	
500-192075-7	FAB DUP	Total/NA	Water	PrecSep_0	
MB 160-491940/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-491940/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-192075-2 DU	MW-10	Total/NA	Water	PrecSep_0	

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-491410/21-A
Matrix: Water
Analysis Batch: 495354

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 491410

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.07145	U	0.210	0.210	1.00	0.390	pCi/L	12/10/20 13:06	01/15/21 14:49	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.4*		*40 - 110*	*12/10/20 13:06*	*01/15/21 14:49*	*1*

Lab Sample ID: LCS 160-491410/1-A
Matrix: Water
Analysis Batch: 495352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 491410

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	12.40		1.57	1.00	0.400	pCi/L	109	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*77.4*		*40 - 110*

Lab Sample ID: MB 160-491936/23-A
Matrix: Water
Analysis Batch: 494394

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 491936

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.02193	U	0.131	0.131	1.00	0.293	pCi/L	12/15/20 13:25	01/08/21 17:02	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.9*		*40 - 110*	*12/15/20 13:25*	*01/08/21 17:02*	*1*

Lab Sample ID: LCS 160-491936/1-A
Matrix: Water
Analysis Batch: 494394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 491936

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.36		1.39	1.00	0.328	pCi/L	91	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*74.0*		*40 - 110*

Lab Sample ID: 500-192075-2 DU
Matrix: Water
Analysis Batch: 494394

Client Sample ID: MW-10
Prep Type: Total/NA
Prep Batch: 491936

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.751			0.6251		0.428	1.00	0.575	pCi/L			0.15	1

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

Lab Sample ID: 500-192075-2 DU
Matrix: Water
Analysis Batch: 494394

Client Sample ID: MW-10
Prep Type: Total/NA
Prep Batch: 491936

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	85.9		40 - 110

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-491413/21-A
Matrix: Water
Analysis Batch: 495354

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 491413

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3109	U	0.279	0.280	1.00	0.448	pCi/L	12/10/20 13:42	01/15/21 08:37	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	85.4		40 - 110	12/10/20 13:42	01/15/21 08:37	1
Y Carrier	85.2		40 - 110	12/10/20 13:42	01/15/21 08:37	1

Lab Sample ID: LCS 160-491413/1-A
Matrix: Water
Analysis Batch: 495352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 491413

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			7.50	8.975		1.12	1.00	0.505	pCi/L	120	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	77.4		40 - 110
Y Carrier	83.4		40 - 110

Lab Sample ID: MB 160-491940/23-A
Matrix: Water
Analysis Batch: 494357

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 491940

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.01414	U	0.228	0.228	1.00	0.408	pCi/L	12/15/20 14:03	01/08/21 09:17	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		40 - 110	12/15/20 14:03	01/08/21 09:17	1
Y Carrier	95.3		40 - 110	12/15/20 14:03	01/08/21 09:17	1

Lab Sample ID: LCS 160-491940/1-A
Matrix: Water
Analysis Batch: 494394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 491940

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			7.52	8.559		1.09	1.00	0.525	pCi/L	114	75 - 125		

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

Lab Sample ID: LCS 160-491940/1-A
Matrix: Water
Analysis Batch: 494394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 491940

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	74.0		40 - 110
Y Carrier	86.0		40 - 110

Lab Sample ID: 500-192075-2 DU
Matrix: Water
Analysis Batch: 494394

Client Sample ID: MW-10
Prep Type: Total/NA
Prep Batch: 491940

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	1.01			0.2751	U	0.485	1.00	0.824	pCi/L			0.68	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	85.9		40 - 110
Y Carrier	89.0		40 - 110

Lab Chronicle

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

Job ID: 500-192075-2

Client Sample ID: MW-01
Date Collected: 12/07/20 12:57
Date Received: 12/08/20 10:05

Lab Sample ID: 500-192075-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			491410	12/10/20 13:06	KMP	TAL SL
Total/NA	Analysis	903.0		1	495352	01/15/21 14:43	SCB	TAL SL
Total/NA	Prep	PrecSep_0			491413	12/10/20 13:42	KMP	TAL SL
Total/NA	Analysis	904.0		1	495352	01/15/21 08:34	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	495582	01/18/21 20:59	GRW	TAL SL

Client Sample ID: MW-10
Date Collected: 12/08/20 13:13
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			491936	12/15/20 13:25	KMP	TAL SL
Total/NA	Analysis	903.0		1	494394	01/08/21 16:56	TMS	TAL SL
Total/NA	Prep	PrecSep_0			491940	12/15/20 14:03	KMP	TAL SL
Total/NA	Analysis	904.0		1	494394	01/08/21 09:10	TMS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	495361	01/15/21 21:49	GRW	TAL SL

Client Sample ID: MW-02
Date Collected: 12/09/20 08:22
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			491936	12/15/20 13:25	KMP	TAL SL
Total/NA	Analysis	903.0		1	494394	01/08/21 16:57	TMS	TAL SL
Total/NA	Prep	PrecSep_0			491940	12/15/20 14:03	KMP	TAL SL
Total/NA	Analysis	904.0		1	494394	01/08/21 09:11	TMS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	495361	01/15/21 21:49	GRW	TAL SL

Client Sample ID: MW-03
Date Collected: 12/09/20 09:18
Date Received: 12/10/20 10:20

Lab Sample ID: 500-192075-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			491936	12/15/20 13:25	KMP	TAL SL
Total/NA	Analysis	903.0		1	494394	01/08/21 16:57	TMS	TAL SL
Total/NA	Prep	PrecSep_0			491940	12/15/20 14:03	KMP	TAL SL
Total/NA	Analysis	904.0		1	494394	01/08/21 09:11	TMS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	495361	01/15/21 21:49	GRW	TAL SL

Lab Chronicle

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

Job ID: 500-192075-2

Client Sample ID: MW-04

Lab Sample ID: 500-192075-5

Date Collected: 12/09/20 10:14

Matrix: Water

Date Received: 12/10/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			491936	12/15/20 13:25	KMP	TAL SL
Total/NA	Analysis	903.0		1	494394	01/08/21 16:57	TMS	TAL SL
Total/NA	Prep	PrecSep_0			491940	12/15/20 14:03	KMP	TAL SL
Total/NA	Analysis	904.0		1	494394	01/08/21 09:02	TMS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	495361	01/15/21 21:49	GRW	TAL SL

Client Sample ID: MW-05

Lab Sample ID: 500-192075-6

Date Collected: 12/09/20 11:23

Matrix: Water

Date Received: 12/10/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			491936	12/15/20 13:25	KMP	TAL SL
Total/NA	Analysis	903.0		1	494394	01/08/21 16:58	TMS	TAL SL
Total/NA	Prep	PrecSep_0			491940	12/15/20 14:03	KMP	TAL SL
Total/NA	Analysis	904.0		1	494394	01/08/21 09:03	TMS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	495361	01/15/21 21:49	GRW	TAL SL

Client Sample ID: FAB DUP

Lab Sample ID: 500-192075-7

Date Collected: 12/08/20 00:00

Matrix: Water

Date Received: 12/10/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			491936	12/15/20 13:25	KMP	TAL SL
Total/NA	Analysis	903.0		1	494394	01/08/21 16:58	TMS	TAL SL
Total/NA	Prep	PrecSep_0			491940	12/15/20 14:03	KMP	TAL SL
Total/NA	Analysis	904.0		1	494394	01/08/21 09:03	TMS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	495361	01/15/21 21:49	GRW	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, 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: 500-192075-2

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	004553	11-30-21

TestAmerica Chicago
2417 Bond Street

University Park, IL 60484-3101
phone 708.534.5200 fax 708.534.5211

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Rich Gnat	Site Contact: Mitchel Dolan	Date: 12/7/20	COC No:
KPRG and Associates, Inc.	Tel/Fax: (262) 781-0475	Lab Contact: Diana Mockler	Carrier: FedEx	____ of ____ COCs
14665 West Lisbon Road, Suite 1A	**Analysis Turnaround Time**			Sampler:
Brookfield, WI 53154	☐ CALENDAR DAYS ☐ WORKING DAYS			**For Lab Use Only:**
(262) 781-0475 Phone	TAT if different from Below ____			Walk-in Client:
(262) 781-0478 FAX	☐ 2 weeks			Lab Sampling:
Project Name: Powerton CCR FAB	☒ 1 week			
Site: Powerton Station - Pekin, IL	☐ 2 days			Job / SDG No.:
P O # 12313.1	☐ 1 day			500-192075

500-192075 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	903.0, 904.0	6010C, 6020A, 7470A	2540C, 4500_F_C, SM4500_Cl_E, SM4500_SO4_E	SM4500_SO4_E Local Method	Sample Specific Notes:
MW-01	12/7	1257	G	W	7	N	N	X	X	X	X	
								4	4	1	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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 & Comments: Lab Project #50011612. Appendix III Parameters and Custom Appendix IV FAB Metals; As, Ba, Cr, Co, Pb, Mo, Se

-0.1, 0.3

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: ____ Corr'd: ____	Therm ID No.: ____

Relinquished by: **Mitchel Dolan** MMD	Company: **KPRG**	Date/Time: 12/7/20/1600	Received by: **FedEx**	Company:	Date/Time: 12/7/20 / 1600
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Shin Scott	Company: TA-CHI	Date/Time: 12/8/20 1005

Form No. CA-C-WI-002, Rev. 4.18, dated 9/5/2018

TestAmerica Chicago
2417 Bond Street

University Park, IL 60484-3101
phone 708.534.5200 fax 708.534.5211

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Rich Gnat	Site Contact: Mitchel Dolan	Date: 12/9/20	COC No:
KPRG and Associates, Inc.	Tel/Fax: (262) 781-0475	Lab Contact: Diana Mockler	Carrier: FedEx	_____ of _____ COCs
14665 West Lisbon Road, Suite 1A	Analysis Turnaround Time			Sampler:
Brookfield, WI 53154	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
(262) 781-0475 Phone	TAT if different from Below _____			Walk-in Client:
(262) 781-0478 FAX	☐ 2 weeks			Lab Sampling:
Project Name: Powerton CCR FAB	☒ 1 week			
Site: Powerton Station - Pekin, IL	☐ 2 days			Job / SDG No.:
P O # 12313.1	☐ 1 day			500-192075

500-192075 COC

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	903.0, 904.0	6010C, 6020A, 7470A	2540C, 4500_F_C; SM4500_Cl_E; SM4500_SO4_E	SM4500_SO4_E Local Method	Sample Specific Notes:
2	MW-10	12/8	1313	G	W	7	N	N	X	X	X	X	
3	MW-02	12/4	0822										
4	MW-03	12/9	0918										
5	MW-04	12/9	1014										
6	MW-05	12/9	1123										
7	FAB DUP	12/8	—										
									4	4	1	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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 & Comments: Lab Project #50011612. Appendix III Parameters and Custom Appendix IV FAB Metals; As, Ba, Cr, Co, Pb, Mo, Se

-1.1, -2.3

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____
Relinquished by: **Mitchel Dolan** MDD	Company: **KPRG**	Date/Time: 12/9/20 1600	Received by: **FedEx**	Company:	Date/Time: 12/9/2020 1600
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TAL-CHI	Date/Time: 12/10/20 1020

Form No. CA-C-WI-002, Rev. 4.18, dated 9/5/2018

500-192075 Wayb

ORIGIN ID:PIAA (262) 622-1143
MITCHEL DOLAN

414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 07DEC20
ACTWGT: 58.00 LB
CAD: 6994780/SSFE2121
DIMS: 23x13x13 IN

BILL THIRD PARTY

TO TEST AMERICA
TEST AMERICA
2417 BOND ST

UNIVERSITY PARK IL 60484

(000) 000-0000 REF:
INV:
PO: DEPT:

Part # 156297-495 REV# EXP 07/21

FedEx Express

TRK# 0201 7810 2858 7674

TUE - 08 DEC 4:30P
STANDARD OVERNIGHT

XH JOTA

48gt

60484
IL-US ORD

ORIGIN ID:PIAA (262) 622-1143
MITCHEL DOLAN

414 PLAZA DR STE

WESTMONT, IL 605
UNITED STATES

SHIP DATE: 07DEC20
ACTWGT: 56.05 LB
CAD: 6994780/SSFE2121
DIMS: 23x13x13 IN

BILL THIRD PARTY

TO TEST AM
TEST A
2417 BOND

UNIVERSITY PARK

519
29
5
16:30
A
2122
12.08

(000) 000-0000 REF:
INV:
PO: DEPT:

Part # 156297-495 REV# EXP 07/21

FedEx Express

TRK# 0201 7810 2849 2122

TUE - 08 DEC 4:30P
STANDARD OVERNIGHT

XH JOTA

48gt

60484
IL-US ORD

ORIGIN ID:PIAA (000) 000-0000
TEST AMERICA

414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 09DEC20
ACTWGT: 53.10 LB
CAD: 6994780/SSFE2121
DIMS: 24x18x12 IN

BILL THIRD PARTY

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

UNIVERSITY PARK IL 60484

(708) 534-5200 REF:
INV:
PO: DEPT:

500-192075 Wayb

FedEx Express

4 of 5

MPS# 0263 **7811 5518 6684**

Mstr# 7811 5518 6651

0201

THU - 10 DEC 4:30P
STANDARD OVERNIGHT

XH JOTA

48 qt

IL-US **60484** **ORD**

Part # 156297-5518/9812 SHP 07/21

ORIGIN ID:PIAA (000) 000-0000
TEST AMERICA

414 PLAZA DR STE 106

WESTMONT, IL 60559
UNITED STATES US

SHIP DATE: 09DEC20
ACTWGT: 53.10 LB
CAD: 6994780/SSFE2121
DIMS: 24x18x12 IN

BILL THIRD PARTY

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

UNIVERSITY PARK IL 60484

(708) 534-5200 REF:
INV:
PO: DEPT:

FedEx Express

5 of 5

MPS# 0263 **7811 5518 6695**

Mstr# 7811 5518 6651

0201

THU - 10 DEC 4:30P
STANDARD OVERNIGHT

XH JOTA

48 qt

US **60484** **ORD**

Part # 156297-5518/9812 SHP 07/21

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-143208.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Diana.Mockler@Eurofinset.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-192075-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 1/7/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Powerton CCR FAB	Project #: 50011612			
Site: MWG - Powerton	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	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/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-01 (500-192075-1)	12/7/20	12:57 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs

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

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	[signature]	12/8/20 1500	ETA	Fed Ex		
	Relinquished by: Fed Ex	Date/Time:	Company	Received by: Mallory O'Sara	Date/Time: 12/9/20 09:37	Company ETA-STL
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 11/01/2020

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-143310.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Diana.Mockler@Eurofinset.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-192075-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 12/17/2020			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Powerton CCR FAB	Project #: 50011612			
Site: MWG - Powerton	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	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/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-10 (500-192075-2)	12/8/20	13:13 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-02 (500-192075-3)	12/9/20	08:22 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-03 (500-192075-4)	12/9/20	09:18 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-04 (500-192075-5)	12/9/20	10:14 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-05 (500-192075-6)	12/9/20	11:23 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
FAB DUP (500-192075-7)	12/8/20	Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs

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

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	12/10/20 1700	ETA	Fed EX		
2	Relinquished by: Fed EX	Date/Time:	Company	Received by: [signature]	Date/Time: 12/11/20 08:48	Company ETA-STL
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 11/01/2020

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mockler, Diana J	Carrier Tracking No(s):	COC No: 500-143310.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Diana.Mockler@Eurofinset.com	State of Origin: Illinois	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Illinois		Job #: 500-192075-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 12/17/2020			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Powerton CCR FAB	Project #: 50011612			
Site: MWG - Powerton	SSOW#:			

Analysis Requested

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

Sample Identification - Client ID (Lab ID)	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/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-10 (500-192075-2)	12/8/20	13:13 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-02 (500-192075-3)	12/9/20	08:22 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-03 (500-192075-4)	12/9/20	09:18 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-04 (500-192075-5)	12/9/20	10:14 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
MW-05 (500-192075-6)	12/9/20	11:23 Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs
FAB DUP (500-192075-7)	12/8/20	Central		Water			X	X	X	3	Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs

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

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	12/10/20 1700	ETA	Fed Ex		
2	Fed Ex			[signature]	12/11/20 08:40	TEDA-SL
3						

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

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-192075-2

Login Number: 192075
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	-0.1,0.3 samples not frozen,-1.1,-2.3
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	

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-192075-2

Login Number: 192075
List Number: 2
Creator: O'Gara, Mallory L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 12/09/20 12:58 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.	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").	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: 500-192075-2

Login Number: 192075
List Number: 3
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 12/11/20 08:10 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.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Tracer/Carrier Summary

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

Job ID: 500-192075-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(40-110)
500-192075-1	MW-01	71.1
500-192075-2	MW-10	91.7
500-192075-2 DU	MW-10	85.9
500-192075-3	MW-02	82.6
500-192075-4	MW-03	84.1
500-192075-5	MW-04	82.0
500-192075-6	MW-05	82.3
500-192075-7	FAB DUP	88.7
LCS 160-491410/1-A	Lab Control Sample	77.4
LCS 160-491936/1-A	Lab Control Sample	74.0
MB 160-491410/21-A	Method Blank	85.4
MB 160-491936/23-A	Method Blank	82.9

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(40-110)	(40-110)
500-192075-1	MW-01	71.1	84.9
500-192075-2	MW-10	91.7	94.6
500-192075-2 DU	MW-10	85.9	89.0
500-192075-3	MW-02	82.6	90.5
500-192075-4	MW-03	84.1	92.3
500-192075-5	MW-04	82.0	102
500-192075-6	MW-05	82.3	104
500-192075-7	FAB DUP	88.7	101
LCS 160-491413/1-A	Lab Control Sample	77.4	83.4
LCS 160-491940/1-A	Lab Control Sample	74.0	86.0
MB 160-491413/21-A	Method Blank	85.4	85.2
MB 160-491940/23-A	Method Blank	82.9	95.3

Tracer/Carrier Legend

Ba = Ba Carrier
Y = Y Carrier

APPENDIX B
Alternate Source Demonstration – March 09, 2020

K P R G

ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

ALTERNATE SOURCE DEMONSTRATION
CCR GROUNDWATER MONITORING – FORMER ASH BASIN
POWERTON GENERATING STATION

March 9, 2020

Ms. Sharene Shealey
Midwest Generation, LLC
529 E. Romeo Road
Romeoville, IL 60446

VIA E-MAIL

Re: Alternate Source Demonstration
Powerton Generating Station – Former Ash Basin

Dear Ms. Shealey:

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 Coal Combustion Residuals (CCR) units that would require monitoring. The initial Detection Monitoring requirements in accordance with the Federal Register, Environmental Protection Agency, 40 CFR Parts 257.94, 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 FAB 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 FAB. The monitoring well network around the FAB consists of six monitoring wells. Wells MW-01 and MW-10 are upgradient wells and wells MW-02, MW-03, MW-04 and MW-05 are the downgradient wells as shown on Figure 1.

A statistical evaluation of the initial detection monitoring data was completed and submitted to Midwest Generation. The statistical evaluations were completed in accordance with the CCR Compliance Statistical Approach for Groundwater Data Evaluation, Midwest Generation Powerton Generating Station dated October 10, 2017. The evaluations included outlier testing, spatial/temporal variability testing, distributional testing, and the establishment of statistical Prediction Limits (PLs) for all Appendix III compounds to which the ninth round of groundwater detection monitoring data were compared to determine whether there may be a statistically significant increase (SSI) for a specific compound at each well location. The evaluations were performed with the

assistance of the Sanitas™ statistical software package and provided in the Statistical Evaluation Summary – 2019 CCR Groundwater Monitoring – Former Ash Basin - Powerton Generating Station dated December 10, 2019. The following conclusion/recommendations were provided:

> "The completed detection monitoring statistical evaluations have determined that there are potential SSIs in downgradient monitoring wells relative to established background for various Appendix III parameters, depending on well location. At this time, KPRG recommends completing an alternate source demonstration to determine whether these potential SSIs may be associated with an actual release from the regulated unit or if another potential historical source in the vicinity of the ash ponds may be affecting the local groundwater quality. If the alternate source demonstration is successful, then detection monitoring will resume. If the alternate source demonstration is not successful, then a transition to an assessment monitoring program complying with Section 257.95 will be required"

Specifically, the potential SSIs were for chloride, fluoride, sulfate and total dissolved solids (TDS) at well location MW-05 and fluoride at well location MW-03. This report summarizes the results of the Alternate Source Demonstration (ASD) in accordance with 40 CFR 257.94(e)(2) completed for the Powerton Generating Station FAB. The report is structured to provide a documentation of field investigation activities, a summary of pertinent LEAF Test data observations, an alternate source evaluation of the SSI parameters, conclusions and recommendations. Each is discussed separately below. The statistical evaluation data tables from the December 10, 2019 submittal are provided in Attachment 1 for reference.

DOCUMENTATION OF FIELD ACTIVITIES

The FAB is an approximate 25-acre inactive CCR surface impoundment. The FAB is not lined and is bisected by a railroad embankment constructed in 2010. Standing water is present in some areas of the FAB along with vegetation and trees that have grown over the remaining CCR within the unit.

To assist in evaluating a potential alternate source for the noted potential SSIs, both water and ash samples were collected within the boundaries of the FAB. A composite water sample was collected from three separate locations within the FAB. The composite sample was poured directly into laboratory prepared containers, transported on ice under a completed chain-of-custody to the analytical laboratory and analyzed for CCR Appendix III detection monitoring parameters. Analytical data package is provided in Attachment 2.

One composite ash sample was collected from within the FAB. The composite sample consisted of a series of equivalent grab samples from across the length of the basin, from the former inlet area to the former outfall, to minimize potential skewing of the sample due to gradation changes (i.e., a larger coarse fraction near the inlet and larger fine fraction near outfall). The individual grab samples were thoroughly mixed to form a single composite sample for the basin. The composite sample was transferred directly into laboratory

prepared containers, placed on ice and shipped to the analytical laboratory under a completed chain-of-custody. The ash sediment sample was analyzed using the Leaching Environmental Assessment Framework (LEAF) test using Method 1313. Under this method, the ash sediment sample underwent leaching over a range of eight pH values plus under "Natural pH" conditions. The Natural pH condition is the actual pH of the ash itself measured in the laboratory prior to any pH modifications performed under the LEAF Test. The collected leachate from each pH value was analyzed for CCR Appendix III detection monitoring parameters. The analytical data package is provided in Attachment 2.

LEAF TEST DATA OBSERVATIONS

The results of the standing basin water and the ash LEAF Test analyses are provided in Tables 1 and 2, respectively. A review of Table 2 indicates that the Natural pH of the FAB ash leachate was 8.5 which is similar to the pH value from the corresponding basin water sample which was measured at 8.2.

Focusing on the LEAF Test data for chloride, fluoride, sulfate and TDS, Figures 2 through 5 illustrate in graphical form these parameters as a function of pH. On those figures are also plotted the results of the Natural pH sample, basin water sample and the groundwater data from the most recent round of monitoring. In general, the following observations are made:

- Chloride – The FAB LEAF curve indicates only a slight correlation between pH and chloride concentrations. The overall chloride concentration range is relatively narrow but the highest concentration values are associated with the lowest and highest pH values. The Natural pH sample plots on the expected range curve for chloride based on its pH as compared to the LEAF Test curve. The monitoring well data chloride concentrations plot within a narrow range of pH and above the LEAF Test Curve (i.e., higher in concentrations). The basin water sample also plots above the curve at a concentration just below that of well MW-05.

- Fluoride – The LEAF Test curve for fluoride indicates a correlation with pH. The data show the highest fluoride concentrations with pH below 5.5, a fairly stable set of concentrations between a pH of 5.5 and 10.5, and a slightly increasing concentration above a pH of 10.5. The Natural pH test concentration, basin water concentration and the monitoring well data all plot on or close to the LEAF Test curve.

- Sulfate – The FAB curve indicates no general correlation between pH and sulfate concentrations. The Natural pH sample plots close to the expected range curve for sulfate based on its pH as compared to the LEAF Test curve. The monitoring well data sulfate concentrations generally plot within a narrow range of pH and above the LEAF Test Curve (i.e, higher in concentrations). The basin water sample also plots above the curve at a concentration just above that of well MW-05.

- Total Dissolved Solids (TDS) – The TDS LEAF Test curve indicates concentrations decreasing from a maximum at pH 2.0 to a minimum at pH 9.0 and then increasing again with increasing pH. The TDS value of the Natural pH sample plots on or near the established LEAF Test curve as does the basin water sample and all of the monitoring well water samples (upgradient and downgradient).

ALTERNATE SOURCE EVALUATOIN OF THE SSI PARAMETERS

As noted above, this SSI alternate source evaluation is focused on chloride, fluoride, sulfate and TDS. Each parameter is discussed separately below.

Chloride

As discussed above, there is a slight correlation between sample pH and chloride concentrations based on the LEAF Test data, with that data ranging in concentration from 1.8 to 17 mg/l. The most recent measured chloride concentrations in upgradient monitoring wells MW-01 and MW-10 ranged 39 to 48 mg/l, respectively. The pooled PL established for the downgradient well data comparison was 62 mg/l. The chloride concentrations in downgradient monitoring wells ranged from 50 to 75 mg/l with the only value exceeding the established PL being the 75 mg/l concertation at well location MW-05. The basin water chloride concentration was 68 mg/l.

Considering the overall low concentration of chloride within the FAB ash sample LEAF Test data as compared to the groundwater data, including upgradient groundwater (wells MW-01 and MW-10), suggests that the chloride concentrations are not associated with leaching from the remaining ash within the basin. However, the basin water sample is higher in chloride concentration than the upgradient monitoring wells and the established downgradient PL of 62 mg/l. Therefore, the elevated chloride concentration noted in downgradient monitoring well MW-05 above the PL may or may not be associated with seepage of the basin water into the groundwater system. The data are inconclusive and, therefore, a more definitive alternate source statement cannot be made at this time.

Fluoride

Although the LEAF Test curve did show a pH correlation of concentrations, the pH values of the groundwater samples were from a very narrow range (7.01 to 7.17). The LEAF Test data for pH values between 5.5 and 9.0 were consistent with fluoride concentrations between 0.22 and 0.37 mg/l. The groundwater fluoride concentrations in upgradient wells ranged from 0.13 to 0.19 mg/l and in downgradient wells from 0.18 to 0.29 mg/l with a downgradient PL of 0.25 mg/l. Considering the distribution of groundwater concentrations and the LEAF Test data, it is not possible to determine whether the fluoride concentrations detected in downgradient wells MW-03 and MW-05, that are above the established PL for this compound, are due to a contribution of fluoride from the remaining ash within the FAB or just spatial variations of fluoride concentrations.

Sulfate

As discussed above, there is no substantive correlation between sample pH and sulfate concentrations based on the LEAF Test data, with that data ranging in concentration from 4.1 to 33 mg/l. The pH values of the groundwater samples during the most recent round of sampling were from a very narrow range (7.01 to 7.17). The LEAF Test data for pH values between 5.5 and 12.0 were consistent with sulfate concentrations between 4.1 and 11 mg/l. The most recent measured sulfate concentrations in upgradient monitoring wells MW-01 and MW-10 ranged 30 to 71 mg/l, respectively. The pooled PL established for the downgradient well data comparison was 85 mg/l. The sulfate concentrations in downgradient monitoring wells ranged from 14 to 110 mg/l, the high value being from well MW-05. The basin water sulfate concentration was 120 mg/l.

Considering the overall low concentration of sulfate within the FAB ash LEAF Test data as compared to the groundwater data, including upgradient groundwater (wells MW-01 and MW-10), suggests that the groundwater sulfate concentrations are not associated with leaching from the remaining ash within the basin. However, the basin water sample is higher in sulfate concentration than both the upgradient monitoring wells and the established downgradient PL of 85 mg/l. Therefore, the elevated sulfate concentration noted in downgradient monitoring well MW-05 above the PL may or may not be associated with seepage of the basin water into the groundwater system. The data are inconclusive and, therefore, a more definitive alternate source statement cannot be made at this time.

TDS

As discussed above, there is a correlation of TDS with pH established by the LEAF Test for TDS with the highest concentrations being associated with the lowest and highest pH leach values. The pH values of the groundwater samples during the most recent round of sampling were from a very narrow range (7.01 to 7.17). The LEAF Test curve TDS values for pH between 7.0 and 12.0 is within a fairly narrow range of 130 to 640 mg/l with the 7.0 pH TDS concentration being 540 mg/l. The TDS values for upgradient wells MW-01 and MW-10 were 550 mg/l and 410 mg/l, respectively. Downgradient monitoring well TDS concentrations range from 380 mg/l (MW-03) to 660 mg/l (MW-05) and the basin water sample had a TDS of 500 mg/l. Considering the distribution of groundwater concentrations and the LEAF Test data, it is not possible to determine whether the TDS concentration detected in downgradient well MW-05 above the established PL of 609 mg/l for this compound is due to a contribution of TDS from the remaining ash within the FAB or just spatial variation of TDS concentrations.

However, there is a strong correlation between sulfate and TDS concentrations as illustrated with the graph on Figure 6 which shows a linear regression R^2 factor of 0.82. This strong correlation does not exist between TDS and any of the other Appendix III parameters. In the above discussion it is clear that the elevated sulfate concentration noted in the monitoring wells, including well MW-05, cannot be attributed as originating from the remaining ash within the FAB. However, the data

are inconclusive relative to potential seepage of basin water into the groundwater system. This is also true when comparing basin water TDS to that from the surrounding monitoring wells. Therefore, a more definitive alternate source statement cannot be made at this time.

CONCLUSIONS/RECOMMENDATIONS

Based on the compound specific discussions provided above and the observation that the FAB was not a lined impoundment when in operation, definitive alternate source statements cannot be made relative to the two potential fluoride SSIs at downgradient wells MW-03 and MW-05 and potential chloride, sulfate and TDS SSIs at well location MW-05. It is, therefore, recommended that the FAB monitoring be shifted from detection monitoring into assessment monitoring in accordance with Section 257.95 of the CCR Rule.

If there are any questions, please contact me at 262-781-0475.

Sincerely,
KPRG and Associates, Inc.

Richard R. Gnat, P.G.
Principal

Timothy Stohner, P.E.
Project Manager/Sr. Engineer

cc: David Bacher, NRG
Joseph Kotas, Midwest Generation

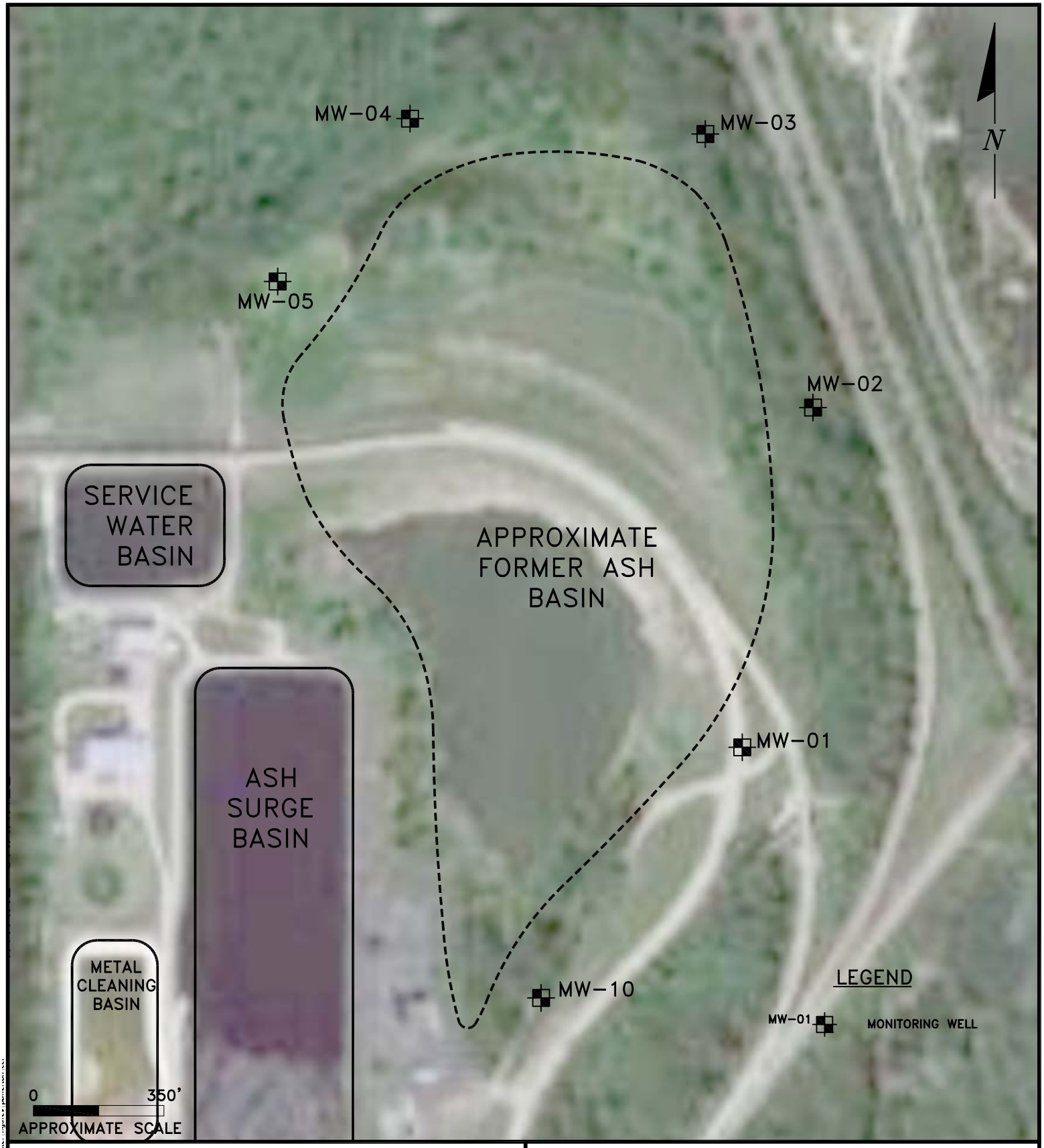
CERTIFICATION

In accordance with Section 257.94(e)(2) of the CCR Rule, I hereby certify based on a review of the information contained within this CCR Alternate Source Demonstration dated March 9, 2020 that the information contained in this report is accurate to the best of my knowledge.

Certified by:
Date: March 9, 2020

Timothy Stohner, P.E.
Illinois Professional Engineer Registration No.: 062.057635
KPRG and Associates, Inc.

FIGURES



ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG

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

Figure 2. Chloride Concentration vs. pH Value - Powerton Station

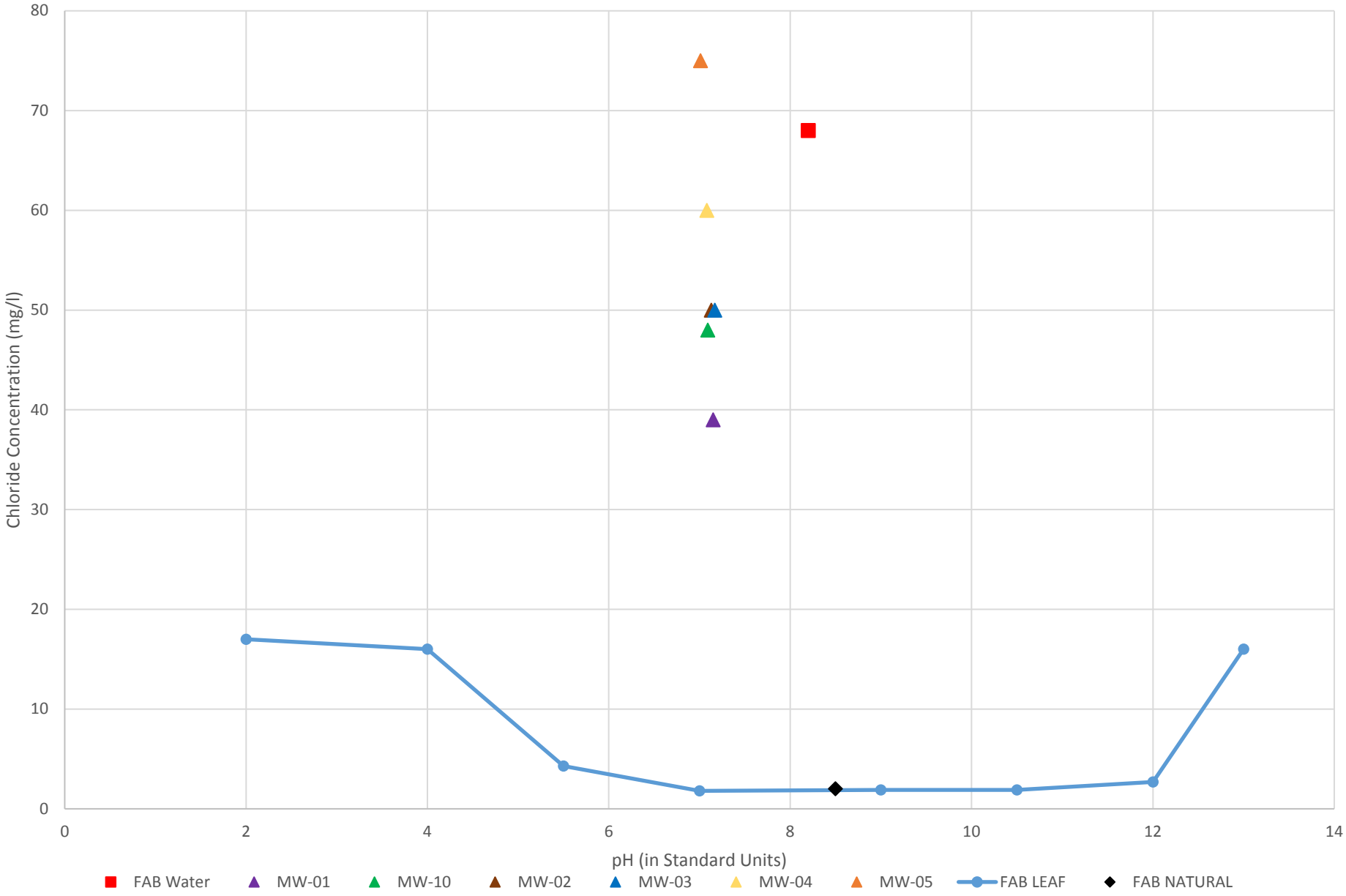


Figure 3. Fluoride Concentration vs. pH Value - Powerton Station

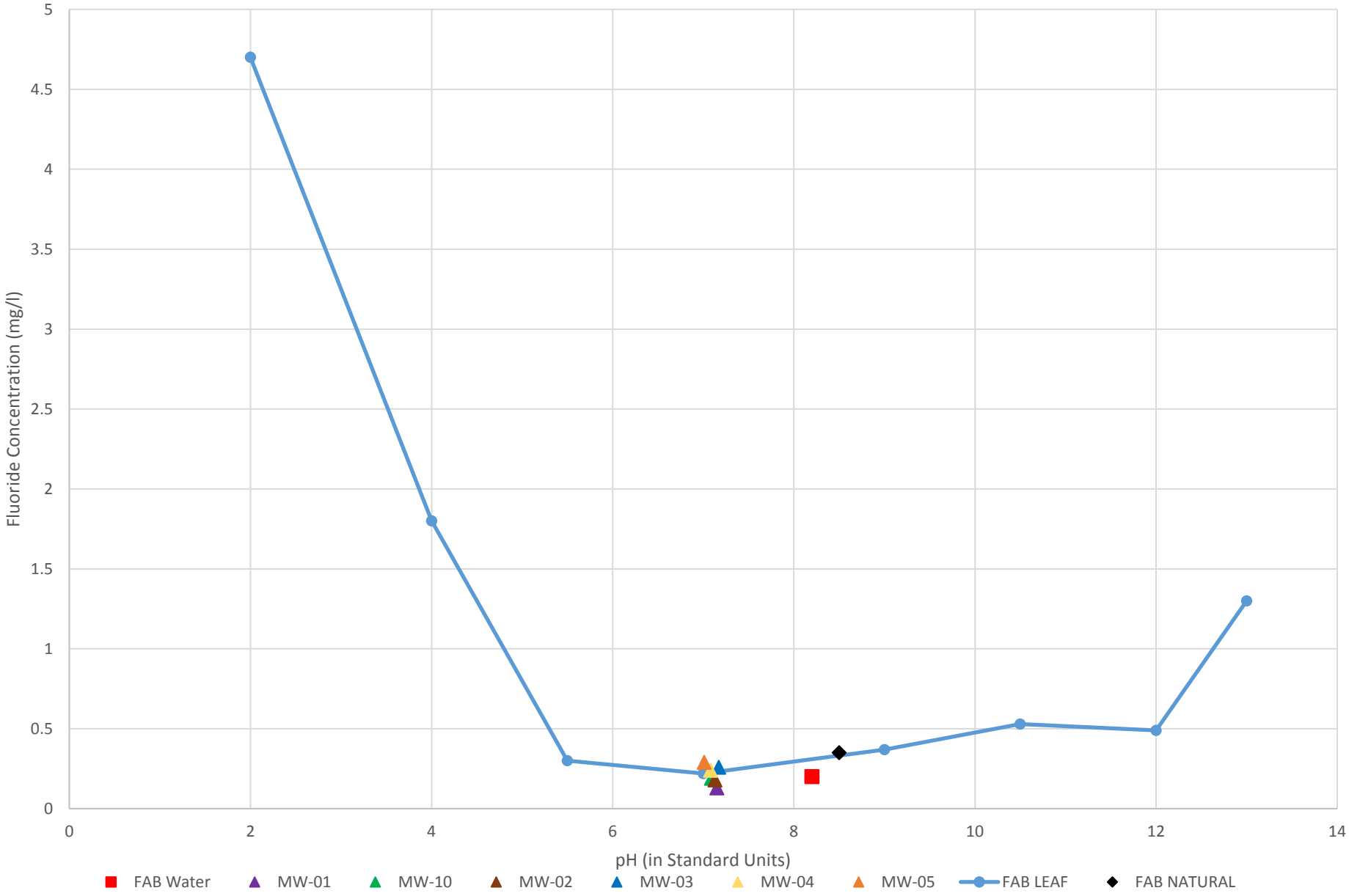


Figure 4. Sulfate Concentration vs. pH Value - Powerton Station

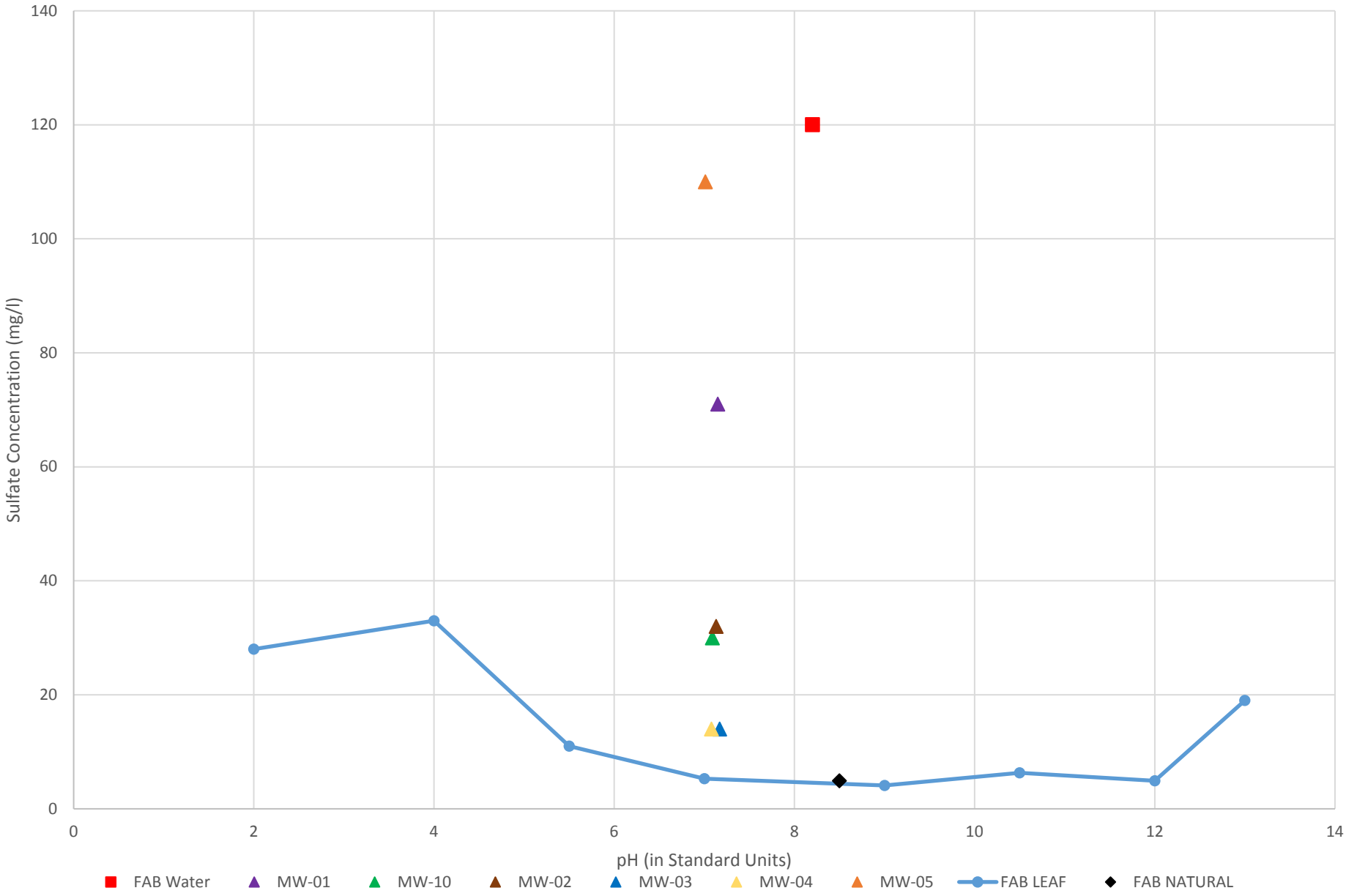


Figure 5. TDS Concentration vs. pH Value - Powerton Station

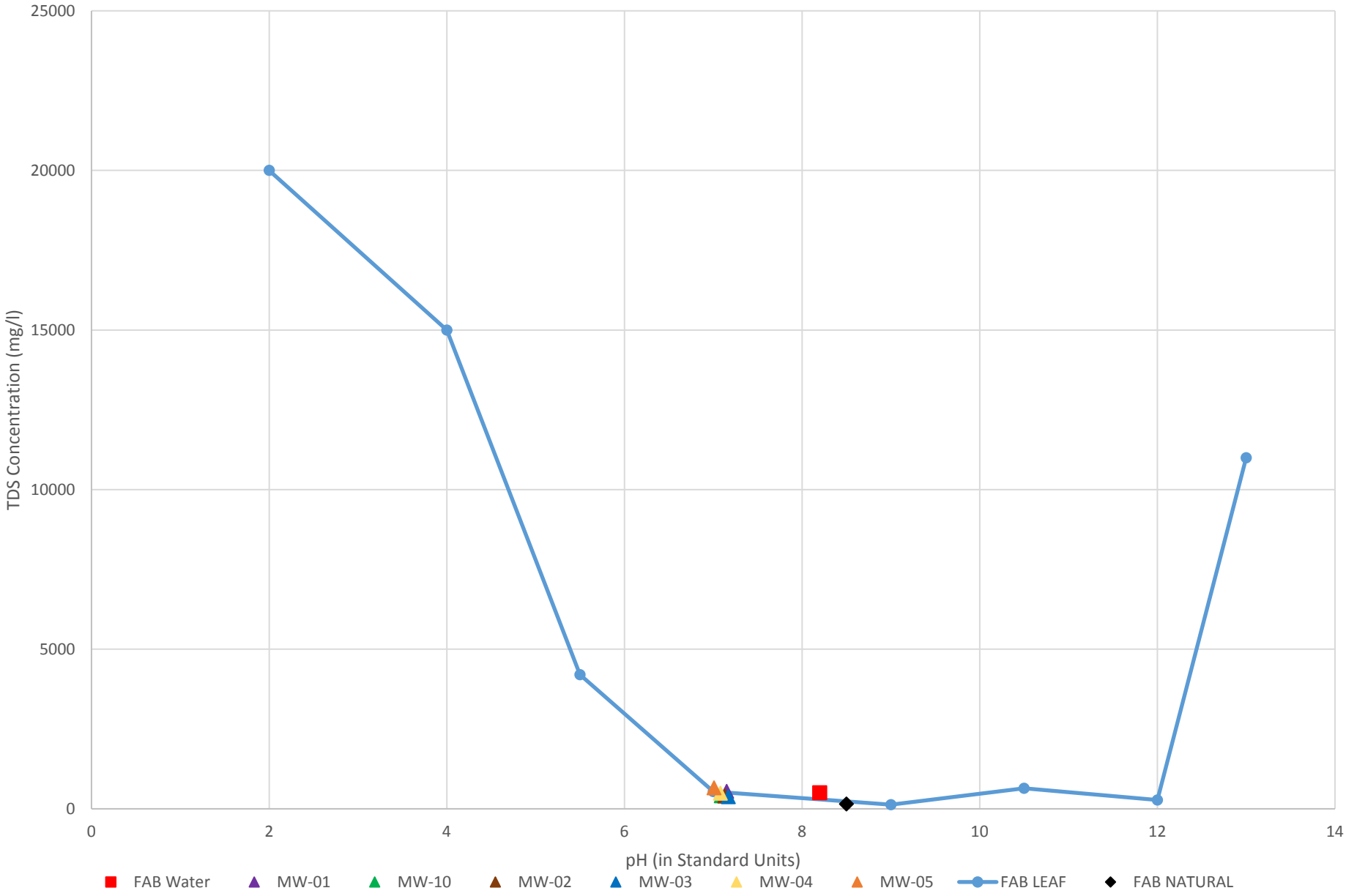
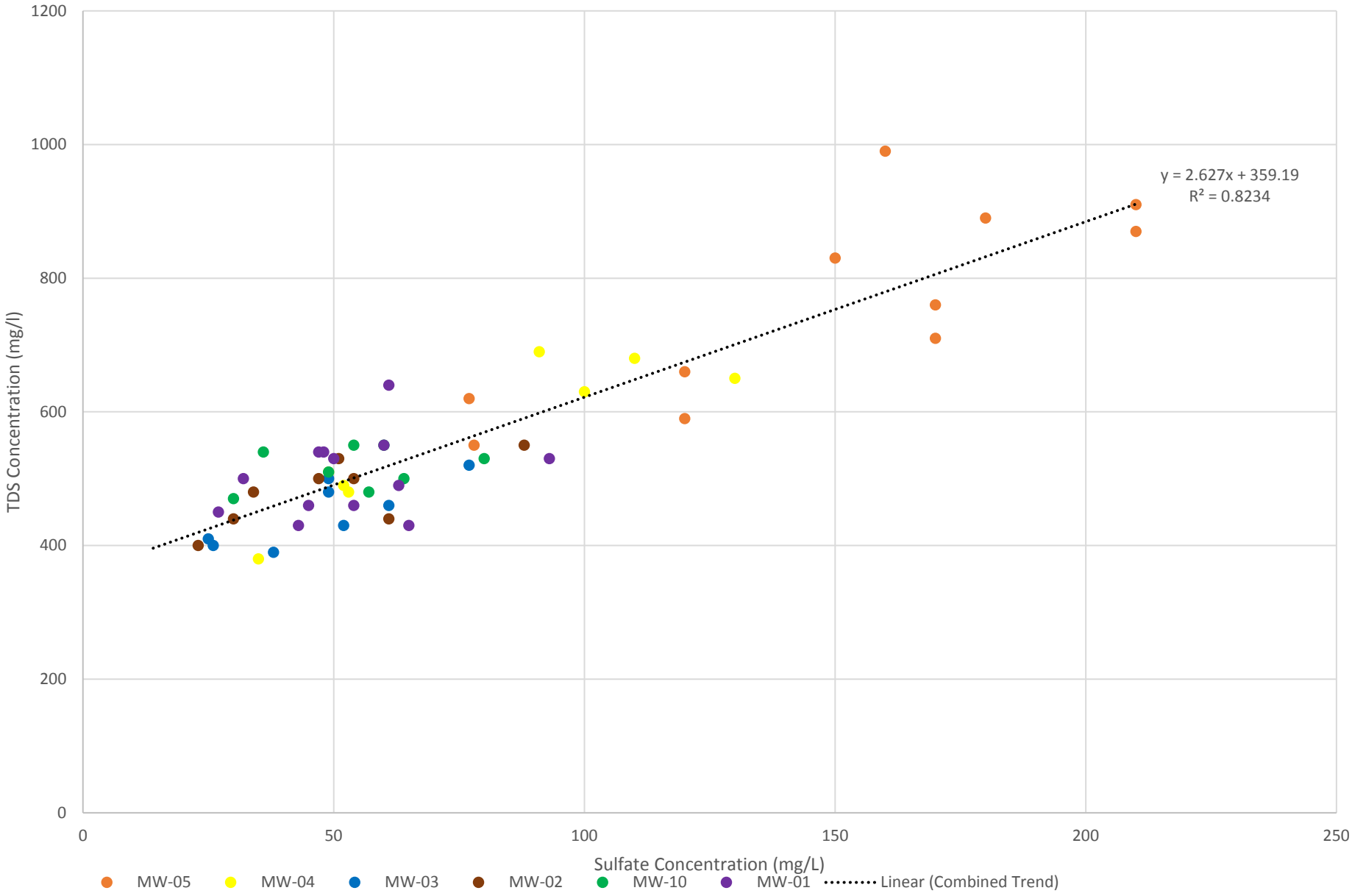


Figure 6. Sulfate vs. TDS - Powerton Station



TABLES

Table 1. FAB Basin Water Results - Midwest Generation Powerton Station, Pekin, Illinois

Sample: PARAMETER	UNITS	Former Ash Basin (FAB)
Boron	mg/L	0.39
Calcium	mg/L	63
Chloride	mg/L	68
Fluoride	mg/L	0.2
pH	SU	8.2
Sulfate	mg/L	120
TDS	mg/L	500

Notes: Units are as noted.
TDS - Total Dissolved Solids

Table 2. FAB LEAF Test Results from Composite Ash Sample - Midwest Generation Powerton Station, Pekin, Illinois

Sample: FAB		LEAF TEST TARGETED pH VALUES								
PARAMETER	UNITS	13.0	12.0	10.5	9.0	7.0	5.5	4.0	2.0	Natural*
Boron	mg/L	0.13	0.13	0.16	0.76	0.96	0.14	0.21	0.5	0.093
Calcium	mg/L	4.7	8.7	3.4	13	91	1,000	3,000	3,500	17
Chloride	mg/L	16	2.7	1.9	1.9	1.8	4.3	16	17	2
Fluoride	mg/L	1.3	0.49	0.53	0.37	0.22	0.3	1.8	4.7	0.35
ORP	millivolts	-23	77	150	260	260	280	210	490	230
pH	SU	13	12.1	10.2	8.8	7.4	5.4	4.2	2	8.5
Spec Cond	umhos/cm	39,000	3,000	200	130	630	6,400	21,000	28,000	130
Sulfate	mg/L	19	4.9	6.3	4.1	5.3	11	33	28	4.9
TDS	mg/L	11,000	280	640	130	540	4,200	15,000	20,000	150

Notes: Units are as noted.
TDS - Total Dissolved Solids
ORP - Oxidation Reduction Potential
Spec Cond - Specific Conductivity

Natural* - pH of ash as measured in the laboratory prior to any pH test modifications.

ATTACHMENT 1
Statistical Data Evaluation Tables – December 10, 2019

Table 1. Detection Monitoring Appendix III Groundwater Analytical Results - 3rd Quarter 2019 - Midwest Generation, LLC, Powerton Station, Pekin, IL.

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
MW-10 up-gradient	6/22/2017	0.5	100	48	0.19	6.81	54	1.0
	8/24/2017	0.3	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
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
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	0.3	75	50	**0.26**	7.17	14	380
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
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**

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 otehers are interwell comparisons.

ATTACHMENT 2
Analytical Data Package

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ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-98598-1
Client Project/Site: Powerton FAB ASD

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

Attn: Richard Gnat

Authorized for release by:
12/6/2019 8:51:25 AM

Carrie Gamber, Senior Project Manager
(412)963-2428
carrie.gamber@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

PA Lab ID: 02-00416

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Job ID: 180-98598-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

CASE NARRATIVE

Client: KPRG and Associates, Inc.

Project: Powerton FAB ASD

Report Number: 180-98598-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 11/12/2019; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.4 C.

The Field Sampler was not listed on the Chain of Custody.

IC

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

METALS

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

GENERAL CHEMSITRY

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

Definitions/Glossary

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

Job ID: 180-98598-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Accreditation/Certification Summary

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

Job ID: 180-98598-1

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	200005	06-30-20

Sample Summary

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

Job ID: 180-98598-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-98598-1	FAB	Water	11/11/19 11:45	11/12/19 14:30	

Method Summary

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

Job ID: 180-98598-1

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	TAL PIT
EPA 6020A	Metals (ICP/MS)	SW846	TAL PIT
EPA 9040C	pH	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

Protocol References:

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

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

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

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

Job ID: 180-98598-1

Client Sample ID: FAB

Date Collected: 11/11/19 11:45
Date Received: 11/12/19 14:30

Lab Sample ID: 180-98598-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9056A		1			300206	12/04/19 13:49	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	298607	11/18/19 19:19	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020A		1			299105	11/21/19 15:18	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	EPA 9040C		1			299122	11/22/19 15:16	PM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	298214	11/14/19 10:26	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

MWW = Margaret Wanyoike

Batch Type: Analysis

AVS = Abbey Smith
MJH = Matthew Hartman
PM = Paloma Hoelzle
RSK = Robert Kurtz

Client Sample Results

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

Job ID: 180-98598-1

Client Sample ID: FAB

Date Collected: 11/11/19 11:45
Date Received: 11/12/19 14:30

Lab Sample ID: 180-98598-1

Matrix: Water

Method: EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68		1.0	0.32	mg/L			12/04/19 13:49	1
Fluoride	0.20		0.10	0.026	mg/L			12/04/19 13:49	1
Sulfate	120		1.0	0.38	mg/L			12/04/19 13:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	390		80	39	ug/L		11/18/19 19:19	11/21/19 15:18	1
Calcium	63000		500	130	ug/L		11/18/19 19:19	11/21/19 15:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2	HF	0.1	0.1	SU			11/22/19 15:16	1
Total Dissolved Solids	500		10	10	mg/L			11/14/19 10:26	1

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-300206/6
Matrix: Water
Analysis Batch: 300206

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.32	mg/L			12/04/19 05:33	1
Fluoride	ND		0.10	0.026	mg/L			12/04/19 05:33	1
Sulfate	ND		1.0	0.38	mg/L			12/04/19 05:33	1

Lab Sample ID: LCS 180-300206/5
Matrix: Water
Analysis Batch: 300206

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	24.6		mg/L		98	80 - 120
Fluoride	1.25	1.31		mg/L		105	80 - 120
Sulfate	25.0	24.5		mg/L		98	80 - 120

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

Lab Sample ID: MB 180-298607/1-A
Matrix: Water
Analysis Batch: 299105

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 298607

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		80	39	ug/L		11/18/19 19:19	11/21/19 14:07	1
Calcium	ND		500	130	ug/L		11/18/19 19:19	11/21/19 14:07	1

Lab Sample ID: LCS 180-298607/2-A
Matrix: Water
Analysis Batch: 299105

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 298607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1250	1260		ug/L		101	80 - 120
Calcium	25000	26400		ug/L		105	80 - 120

Method: EPA 9040C - pH

Lab Sample ID: LCS 180-299122/1
Matrix: Water
Analysis Batch: 299122

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.0		SU		100	99 - 101

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

Lab Sample ID: MB 180-298214/2
Matrix: Water
Analysis Batch: 298214

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	ND		10	10	mg/L			11/14/19 10:26	1

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

Job ID: 180-98598-1

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

Lab Sample ID: LCS 180-298214/1
Matrix: Water
Analysis Batch: 298214

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	188	154		mg/L		82	80 - 120

QC Association Summary

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

Job ID: 180-98598-1

HPLC/IC

Analysis Batch: 300206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98598-1	FAB	Total/NA	Water	EPA 9056A	
MB 180-300206/6	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-300206/5	Lab Control Sample	Total/NA	Water	EPA 9056A	

Metals

Prep Batch: 298607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98598-1	FAB	Total Recoverable	Water	3005A	
MB 180-298607/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-298607/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 299105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98598-1	FAB	Total Recoverable	Water	EPA 6020A	298607
MB 180-298607/1-A	Method Blank	Total Recoverable	Water	EPA 6020A	298607
LCS 180-298607/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020A	298607

General Chemistry

Analysis Batch: 298214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98598-1	FAB	Total/NA	Water	SM 2540C	
MB 180-298214/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-298214/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 299122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98598-1	FAB	Total/NA	Water	EPA 9040C	
LCS 180-299122/1	Lab Control Sample	Total/NA	Water	EPA 9040C	

Chain of Custody Record

381396 eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager:	Site Contact:	Date:	COC No:
Company Name: KPRG and Associates, Inc.	Tel/Email:	Lab Contact:	Carrier:	1 of 1 COCs
Address: 14665 W. Lisbon Rd Ste 1A	**Analysis Turnaround Time**			Sampler:
City/State/Zip: Brookfield / WI / 53005	☐ CALENDAR DAYS ☐ WORKING DAYS			**For Lab Use Only:**
Phone: 262-781-0475	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Powerton FAB ASD	☐ 1 week			
Site: Powerton	☐ 2 days			Job / SDG No.:
P O # 23517	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	pH, TDS, Fl, Metals → Ba, Ca, Cl, Sulfate			Samp
FAB	11-11-19	1145	G	W	5	N	N	X	X	X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								1	1	1	

180-98598 Chain of Custody

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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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 & Comments:
App III Parameters → Boron, Calcium, Chloride, Fluoride, pH, TDS, Sulfate

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	KPRG	11-11-19/1430	FEDEX		11/11/19 / 1430
Relinquished by:	Company:	Date/Time:	Received by: [signature]	Company: TAPitt	Date/Time: 11-12-19 11:15
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:


Cus
DATE
SIGNATUR
eurofins
Environ
TestAmer
1175400
ORIGIN ID:PIAA (000) 000-0000
MITCHEL DOLAN
14 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US
SHIP DATE: 11
ACTWGT: 47.90 LB
CAD: 6[illegible]4779/SSFE2021
DIMS: 23x12x13 IN
BILL THIRD PARTY
TESTAMERICA PITTSBURGH
301 ALPHA DR. RIDC PARK
BLAWNOX PA 15238
(412) 963-7058
REF:
INV:
PO:
DEPT:
FedEx
Express
TUE - 12 NOV 3:00P
STANDARD OVERNIGHT
TRK# 0201 7808 8992 9989
XH AGCA
15238
PA-US
PIT
Uncorrected temp
Thermometer ID
CF 0
Initials
PT-WI-SR-001 effective 11/8/18
180-98598 Waybill

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 180-98598-1

Login Number: 98598
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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.	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?	False	
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	

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ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-98599-1
Client Project/Site: Midwest Generation

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

Attn: Richard Gnat

Authorized for release by:
12/17/2019 12:27:00 PM

Carrie Gamber, Senior Project Manager
(412)963-2428
carrie.gamber@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

PA Lab ID: 02-00416

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Job ID: 180-98599-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

CASE NARRATIVE

Client: KPRG and Associates, Inc.

Project: Midwest Generation

Report Number: 180-98599-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 11/12/2019; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.4 C.

The Field Sampler was not listed on the Chain of Custody.

IC

Several samples were analyzed at a dilution. Elevated reporting limits (RLs) were provided.

METALS

The following samples were diluted to bring the concentration of target analytes within the linear range: FAB - PH 4.0 (180-98599-10) and FAB - PH 2.0 (180-98599-11). Elevated reporting limits (RLs) are provided.

GENERAL CHEMSITRY

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

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Accreditation/Certification Summary

Client: KPRG and Associates, Inc.
Project/Site: Midwest Generation

Job ID: 180-98599-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	200005	06-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids
SM 2510B		Solid	Specific Conductance
SM 2540C		Solid	Total Dissolved Solids
SM 2580B		Solid	Oxidation Reduction Potential

Sample Summary

Client: KPRG and Associates, Inc.
Project/Site: Midwest Generation

Job ID: 180-98599-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-98599-1	FAB	Solid	11/11/19 11:45	11/12/19 11:15	
180-98599-2	FAB - PRETEST	Solid	11/11/19 11:45	11/12/19 11:15	
180-98599-3	FAB - PH 13.0	Solid	11/11/19 11:45	11/12/19 11:15	
180-98599-4	FAB - PH 12.0	Solid	11/11/19 11:45	11/12/19 11:15	
180-98599-5	FAB - PH 10.5	Solid	11/11/19 11:45	11/12/19 11:15	
180-98599-6	FAB - PH 9.0	Solid	11/11/19 11:45	11/12/19 11:15	
180-98599-8	FAB - PH 7.0	Solid	11/11/19 11:45	11/12/19 11:15	
180-98599-9	FAB - PH 5.5	Solid	11/11/19 11:45	11/12/19 11:15	
180-98599-10	FAB - PH 4.0	Solid	11/11/19 11:45	11/12/19 11:15	
180-98599-11	FAB - PH 2.0	Solid	11/11/19 11:45	11/12/19 11:15	
180-98599-12	FAB - NATURAL	Solid	11/11/19 11:45	11/12/19 11:15	
180-98599-13	BLANK LOW	Solid	11/11/19 00:00	11/12/19 11:15	
180-98599-14	BLANK MEDIUM	Solid	11/11/19 00:00	11/12/19 11:15	
180-98599-15	BLANK HIGH	Solid	11/11/19 00:00	11/12/19 11:15	

Method Summary

Client: KPRG and Associates, Inc.
Project/Site: Midwest Generation

Job ID: 180-98599-1

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	TAL PIT
EPA 6020A	Metals (ICP/MS)	SW846	TAL PIT
2540G	SM 2540G	SM22	TAL PIT
EPA 9040C	pH	SW846	TAL PIT
SM 2510B	Conductivity, Specific Conductance	SM	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
SM 2580B	Reduction-Oxidation (REDOX) Potential	SM	TAL PIT
1313	Liquid-Solid Partitioning as a Function of pH via Parallel Batch	SW846	TAL PIT
3010A	Preparation, Total Metals	SW846	TAL PIT

Protocol References:

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

SM22 = Standard Methods For The Examination Of Water And Wastewater, 22nd Edition

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

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Midwest Generation

Job ID: 180-98599-1

Client Sample ID: FAB

Lab Sample ID: 180-98599-1
Matrix: Solid
Date Collected: 11/11/19 11:45
Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			298745	11/19/19 14:17	PM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FAB - PRETEST

Lab Sample ID: 180-98599-2
Matrix: Solid
Date Collected: 11/11/19 11:45
Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			50 g	493.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299215	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	494.0 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299215	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	489.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299215	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	494.0 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299736	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	493.0 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299736	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	490.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299736	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	488.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299736	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FAB - PH 13.0

Lab Sample ID: 180-98599-3
Matrix: Solid
Date Collected: 11/11/19 11:45
Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			50 g	484.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	EPA 9056A		50			300719	12/08/19 19:34	MJH	TAL PIT
	Instrument ID: CHICS2000									
Leach	Leach	1313			50 g	484.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	299237	11/22/19 20:22	MWW	TAL PIT
Leach	Analysis	EPA 6020A		1			300413	12/04/19 18:33	RJR	TAL PIT
	Instrument ID: NEMO									
Leach	Leach	1313			50 g	484.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299215	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Midwest Generation

Job ID: 180-98599-1

Client Sample ID: FAB - PH 13.0

Lab Sample ID: 180-98599-3

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			50 g	484.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2510B		1			299219	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	484.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2540C		1	5 mL	100 mL	299523	11/26/19 11:21	AVS	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	484.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2580B		1			299218	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FAB - PH 12.0

Lab Sample ID: 180-98599-4

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			50 g	493.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	EPA 9056A		5			300719	12/08/19 19:19	MJH	TAL PIT
	Instrument ID: CHICS2000									
Leach	Leach	1313			50 g	493.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	299237	11/22/19 20:22	MWW	TAL PIT
Leach	Analysis	EPA 6020A		1			300413	12/04/19 18:36	RJR	TAL PIT
	Instrument ID: NEMO									
Leach	Leach	1313			50 g	493.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299215	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	493.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2510B		1			299219	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	493.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2540C		1	50 mL	100 mL	299523	11/26/19 11:21	AVS	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	493.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2580B		1			299218	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FAB - PH 10.5

Lab Sample ID: 180-98599-5

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			50 g	494.4 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	EPA 9056A		1			300719	12/08/19 22:18	MJH	TAL PIT
	Instrument ID: CHICS2000									

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Midwest Generation

Job ID: 180-98599-1

Client Sample ID: FAB - PH 10.5

Lab Sample ID: 180-98599-5

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			50 g	494.4 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	299776	11/27/19 19:49	MWW	TAL PIT
Leach	Analysis	EPA 6020A		1			300051	12/01/19 19:58	WTR	TAL PIT
	Instrument ID: M									
Leach	Leach	1313			50 g	494.4 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299736	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	494.4 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2510B		1			299741	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	494.4 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2540C		1	100 mL	100 mL	299835	11/29/19 11:17	AVS	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	494.4 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2580B		1			299738	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FAB - PH 9.0

Lab Sample ID: 180-98599-6

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			50 g	494.5 mL	300270	12/02/19 08:05	MTW	TAL PIT
Leach	Analysis	EPA 9056A		1			300719	12/09/19 01:18	MJH	TAL PIT
	Instrument ID: CHICS2000									
Leach	Leach	1313			50 g	494.5 mL	300270	12/02/19 08:05	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	300352	12/04/19 20:40	MWW	TAL PIT
Leach	Analysis	EPA 6020A		1			300721	12/07/19 16:22	RSK	TAL PIT
	Instrument ID: A									
Leach	Leach	1313			50 g	494.5 mL	300270	12/02/19 08:05	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			300493	12/04/19 08:05	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	494.5 mL	300270	12/02/19 08:05	MTW	TAL PIT
Leach	Analysis	SM 2510B		1			300495	12/04/19 08:05	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	494.5 mL	300270	12/02/19 08:05	MTW	TAL PIT
Leach	Analysis	SM 2540C		1	100 mL	100 mL	300445	12/05/19 11:11	AVS	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	494.5 mL	300270	12/02/19 08:05	MTW	TAL PIT
Leach	Analysis	SM 2580B		1			300494	12/04/19 08:05	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FAB - PH 7.0

Lab Sample ID: 180-98599-8

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			50 g	494.4 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	EPA 9056A		1			300719	12/08/19 19:05	MJH	TAL PIT
	Instrument ID: CHICS2000									
Leach	Leach	1313			50 g	494.4 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	299237	11/22/19 20:22	MWW	TAL PIT
Leach	Analysis	EPA 6020A		1			300413	12/04/19 18:38	RJR	TAL PIT
	Instrument ID: NEMO									
Leach	Leach	1313			50 g	494.4 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299215	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	494.4 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2510B		1			299219	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	494.4 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2540C		1	100 mL	100 mL	299523	11/26/19 11:21	AVS	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	494.4 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2580B		1			299218	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FAB - PH 5.5

Lab Sample ID: 180-98599-9

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			50 g	492.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	EPA 9056A		10			300719	12/08/19 22:48	MJH	TAL PIT
	Instrument ID: CHICS2000									
Leach	Leach	1313			50 g	492.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	299776	11/27/19 19:49	MWW	TAL PIT
Leach	Analysis	EPA 6020A		1			300051	12/01/19 20:03	WTR	TAL PIT
	Instrument ID: M									
Leach	Leach	1313			50 g	492.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299736	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	492.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2510B		1			299741	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	492.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2540C		1	25 mL	100 mL	299835	11/29/19 11:17	AVS	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	492.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2580B		1			299738	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Midwest Generation

Job ID: 180-98599-1

Client Sample ID: FAB - PH 4.0

Lab Sample ID: 180-98599-10

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			50 g	486.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	EPA 9056A		50			300719	12/08/19 23:33	MJH	TAL PIT
	Instrument ID: CHICS2000									
Leach	Leach	1313			50 g	486.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	299776	11/27/19 19:49	MWW	TAL PIT
Leach	Analysis	EPA 6020A		1			300051	12/01/19 20:08	WTR	TAL PIT
	Instrument ID: M									
Leach	Leach	1313			50 g	486.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	299776	11/27/19 19:49	MWW	TAL PIT
Leach	Analysis	EPA 6020A		10			300306	12/03/19 19:46	WTR	TAL PIT
	Instrument ID: NEMO									
Leach	Leach	1313			50 g	486.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299736	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	486.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2510B		1			299741	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	486.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2540C		1	5 mL	100 mL	299835	11/29/19 11:17	AVS	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	486.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2580B		1			299738	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FAB - PH 2.0

Lab Sample ID: 180-98599-11

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			50 g	484.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	EPA 9056A		50			300719	12/08/19 23:48	MJH	TAL PIT
	Instrument ID: CHICS2000									
Leach	Leach	1313			50 g	484.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	299776	11/27/19 19:49	MWW	TAL PIT
Leach	Analysis	EPA 6020A		1			300051	12/01/19 20:13	WTR	TAL PIT
	Instrument ID: M									
Leach	Leach	1313			50 g	484.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	299776	11/27/19 19:49	MWW	TAL PIT
Leach	Analysis	EPA 6020A		10			300306	12/03/19 19:48	WTR	TAL PIT
	Instrument ID: NEMO									
Leach	Leach	1313			50 g	484.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299736	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	484.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2510B		1			299741	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Midwest Generation

Job ID: 180-98599-1

Client Sample ID: FAB - PH 2.0

Lab Sample ID: 180-98599-11
Matrix: Solid
Date Collected: 11/11/19 11:45
Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			50 g	484.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2540C		1	5 mL	100 mL	299835	11/29/19 11:17	AVS	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	484.5 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2580B		1			299738	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FAB - NATURAL

Lab Sample ID: 180-98599-12
Matrix: Solid
Date Collected: 11/11/19 11:45
Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			50 g	494.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	EPA 9056A		1			300719	12/08/19 18:35	MJH	TAL PIT
	Instrument ID: CHICS2000									
Leach	Leach	1313			50 g	494.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	299237	11/22/19 20:22	MWW	TAL PIT
Leach	Analysis	EPA 6020A		1			300413	12/04/19 18:43	RJR	TAL PIT
	Instrument ID: NEMO									
Leach	Leach	1313			50 g	494.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299215	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	494.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2510B		1			299219	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	494.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2540C		1	100 mL	100 mL	299523	11/26/19 11:21	AVS	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			50 g	494.5 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2580B		1			299218	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BLANK LOW

Lab Sample ID: 180-98599-13
Matrix: Solid
Date Collected: 11/11/19 00:00
Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	EPA 9056A		25			300719	12/08/19 19:49	MJH	TAL PIT
	Instrument ID: CHICS2000									
Leach	Leach	1313			1.0 g	500 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	EPA 9056A		100			300719	12/09/19 00:03	MJH	TAL PIT
	Instrument ID: CHICS2000									

Client Sample ID: BLANK LOW

Lab Sample ID: 180-98599-13

Date Collected: 11/11/19 00:00

Matrix: Solid

Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			1.0 g	500 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	299776	11/27/19 19:49	MWW	TAL PIT
Leach	Analysis	EPA 6020A		1			300051	12/01/19 20:18	WTR	TAL PIT
	Instrument ID: M									
Leach	Leach	1313			1.0 g	500 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	299776	11/27/19 19:49	MWW	TAL PIT
Leach	Analysis	EPA 6020A		1			300306	12/03/19 19:43	WTR	TAL PIT
	Instrument ID: NEMO									
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	299237	11/22/19 20:22	MWW	TAL PIT
Leach	Analysis	EPA 6020A		1			300413	12/04/19 18:31	RJR	TAL PIT
	Instrument ID: NEMO									
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299215	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299736	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2510B		1			299219	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2510B		1			299741	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2540C		1	15 mL	100 mL	299523	11/26/19 11:21	AVS	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2540C		1	1 mL	100 mL	299835	11/29/19 11:17	AVS	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2580B		1			299218	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2580B		1			299738	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BLANK MEDIUM

Lab Sample ID: 180-98599-14

Date Collected: 11/11/19 00:00

Matrix: Solid

Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	EPA 9056A		1			300719	12/08/19 18:50	MJH	TAL PIT
	Instrument ID: CHICS2000									

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Midwest Generation

Job ID: 180-98599-1

Client Sample ID: BLANK MEDIUM

Lab Sample ID: 180-98599-14

Date Collected: 11/11/19 00:00
Matrix: Solid
Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	299237	11/22/19 20:22	MWW	TAL PIT
Leach	Analysis	EPA 6020A		1			300413	12/04/19 18:41	RJR	TAL PIT
	Instrument ID: NEMO									
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299215	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2510B		1			299219	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2540C		1	100 mL	100 mL	299523	11/26/19 11:21	AVS	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2580B		1			299218	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BLANK HIGH

Lab Sample ID: 180-98599-15

Date Collected: 11/11/19 00:00
Matrix: Solid
Date Received: 11/12/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	EPA 9056A		50			300719	12/08/19 20:34	MJH	TAL PIT
	Instrument ID: CHICS2000									
Leach	Leach	1313			1.0 g	500 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	EPA 9056A		5			300719	12/08/19 22:33	MJH	TAL PIT
	Instrument ID: CHICS2000									
Leach	Leach	1313			1.0 g	500 mL	300270	12/02/19 08:05	MTW	TAL PIT
Leach	Analysis	EPA 9056A		1			300719	12/09/19 01:32	MJH	TAL PIT
	Instrument ID: CHICS2000									
Leach	Leach	1313			1.0 g	500 mL	300270	12/02/19 08:05	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	300352	12/04/19 20:40	MWW	TAL PIT
Leach	Analysis	EPA 6020A		1			300721	12/07/19 16:25	RSK	TAL PIT
	Instrument ID: A									
Leach	Leach	1313			1.0 g	500 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	299776	11/27/19 19:49	MWW	TAL PIT
Leach	Analysis	EPA 6020A		1			300051	12/01/19 19:19	WTR	TAL PIT
	Instrument ID: M									
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	299237	11/22/19 20:22	MWW	TAL PIT
Leach	Analysis	EPA 6020A		1			300413	12/04/19 18:14	RJR	TAL PIT
	Instrument ID: NEMO									
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299215	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Midwest Generation

Job ID: 180-98599-1

Client Sample ID: BLANK HIGH

Date Collected: 11/11/19 00:00
Date Received: 11/12/19 11:15

Lab Sample ID: 180-98599-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			1.0 g	500 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			299736	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	300270	12/02/19 08:05	MTW	TAL PIT
Leach	Analysis	EPA 9040C		1			300493	12/04/19 08:05	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2510B		1			299219	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2510B		1			299741	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	300270	12/02/19 08:05	MTW	TAL PIT
Leach	Analysis	SM 2510B		1			300495	12/04/19 08:05	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2540C		1	2 mL	100 mL	299523	11/26/19 11:21	AVS	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2540C		1	50 mL	100 mL	299835	11/29/19 11:17	AVS	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	300270	12/02/19 08:05	MTW	TAL PIT
Leach	Analysis	SM 2540C		1	100 mL	100 mL	300445	12/05/19 11:11	AVS	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	299157	11/20/19 09:15	MTW	TAL PIT
Leach	Analysis	SM 2580B		1			299218	11/22/19 09:15	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	299658	11/25/19 08:00	MTW	TAL PIT
Leach	Analysis	SM 2580B		1			299738	11/27/19 08:00	MTW	TAL PIT
	Instrument ID: NOEQUIP									
Leach	Leach	1313			1.0 g	500 mL	300270	12/02/19 08:05	MTW	TAL PIT
Leach	Analysis	SM 2580B		1			300494	12/04/19 08:05	MTW	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: KPRG and Associates, Inc.
Project/Site: Midwest Generation

Job ID: 180-98599-1

Analyst References:

Lab: TAL PIT

Batch Type: Leach

MTW = Michael Wesoloski

Batch Type: Prep

MWW = Margaret Wanyoike

Batch Type: Analysis

AVS = Abbey Smith
MJH = Matthew Hartman
MTW = Michael Wesoloski
PM = Paloma Hoelzle
RJR = Ron Rosenbaum
RSK = Robert Kurtz
WTR = Bill Reinheimer

Client Sample ID: FAB
Lab Sample ID: 180-98599-1
Date Collected: 11/11/19 11:45
Matrix: Solid
Date Received: 11/12/19 11:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	1		0.1	0.1	%			11/19/19 14:17	1
Percent Solids	99.0		0.1	0.1	%			11/19/19 14:17	1

Client Sample ID: FAB - PRETEST
Lab Sample ID: 180-98599-2
Date Collected: 11/11/19 11:45
Matrix: Solid
Date Received: 11/12/19 11:15

General Chemistry - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.4		0.1	0.1	SU			11/22/19 09:15	1
pH	6.5		0.1	0.1	SU			11/22/19 09:15	1
pH	12.8		0.1	0.1	SU			11/22/19 09:15	1
pH	11.7		0.1	0.1	SU			11/27/19 08:00	1
pH	6.4		0.1	0.1	SU			11/27/19 08:00	1
pH	5.4		0.1	0.1	SU			11/27/19 08:00	1
pH	5.3		0.1	0.1	SU			11/27/19 08:00	1

Client Sample ID: FAB - PH 13.0
Lab Sample ID: 180-98599-3
Date Collected: 11/11/19 11:45
Matrix: Solid
Date Received: 11/12/19 11:15

Method: EPA 9056A - Anions, Ion Chromatography - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		50	16	mg/L			12/08/19 19:34	50
Fluoride	ND		5.0	1.3	mg/L			12/08/19 19:34	50
Sulfate	ND		50	19	mg/L			12/08/19 19:34	50

Method: EPA 6020A - Metals (ICP/MS) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	130		80	39	ug/L		11/22/19 20:22	12/04/19 18:33	1
Calcium	4700		500	130	ug/L		11/22/19 20:22	12/04/19 18:33	1

General Chemistry - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	13.0		0.1	0.1	SU			11/22/19 09:15	1
Specific Conductance	39000		1.0	1.0	umhos/cm			11/22/19 09:15	1
Total Dissolved Solids	11000		200	200	mg/L			11/26/19 11:21	1
Oxidation Reduction Potential	-23		10	10	millivolts			11/22/19 09:15	1

Client Sample ID: FAB - PH 12.0
Lab Sample ID: 180-98599-4
Date Collected: 11/11/19 11:45
Matrix: Solid
Date Received: 11/12/19 11:15

Method: EPA 9056A - Anions, Ion Chromatography - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.7	J	5.0	1.6	mg/L			12/08/19 19:19	5
Fluoride	0.49	J	0.50	0.13	mg/L			12/08/19 19:19	5
Sulfate	4.9	J	5.0	1.9	mg/L			12/08/19 19:19	5

Method: EPA 6020A - Metals (ICP/MS) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	130		80	39	ug/L		11/22/19 20:22	12/04/19 18:36	1

Client Sample ID: FAB - PH 12.0

Lab Sample ID: 180-98599-4

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	8700		500	130	ug/L		11/22/19 20:22	12/04/19 18:36	1

General Chemistry - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	12.1		0.1	0.1	SU			11/22/19 09:15	1
Specific Conductance	3000		1.0	1.0	umhos/cm			11/22/19 09:15	1
Total Dissolved Solids	280		20	20	mg/L			11/26/19 11:21	1
Oxidation Reduction Potential	77		10	10	millivolts			11/22/19 09:15	1

Client Sample ID: FAB - PH 10.5

Lab Sample ID: 180-98599-5

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

Method: EPA 9056A - Anions, Ion Chromatography - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.9		1.0	0.32	mg/L			12/08/19 22:18	1
Fluoride	0.53		0.10	0.026	mg/L			12/08/19 22:18	1
Sulfate	6.3		1.0	0.38	mg/L			12/08/19 22:18	1

Method: EPA 6020A - Metals (ICP/MS) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	160		80	39	ug/L		11/27/19 19:49	12/01/19 19:58	1
Calcium	3400		500	130	ug/L		11/27/19 19:49	12/01/19 19:58	1

General Chemistry - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	10.2		0.1	0.1	SU			11/27/19 08:00	1
Specific Conductance	200		1.0	1.0	umhos/cm			11/27/19 08:00	1
Total Dissolved Solids	640		10	10	mg/L			11/29/19 11:17	1
Oxidation Reduction Potential	150		10	10	millivolts			11/27/19 08:00	1

Client Sample ID: FAB - PH 9.0

Lab Sample ID: 180-98599-6

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

Method: EPA 9056A - Anions, Ion Chromatography - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.9		1.0	0.32	mg/L			12/09/19 01:18	1
Fluoride	0.37		0.10	0.026	mg/L			12/09/19 01:18	1
Sulfate	4.1		1.0	0.38	mg/L			12/09/19 01:18	1

Method: EPA 6020A - Metals (ICP/MS) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	76	J	80	39	ug/L		12/04/19 20:40	12/07/19 16:22	1
Calcium	13000		500	130	ug/L		12/04/19 20:40	12/07/19 16:22	1

General Chemistry - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8		0.1	0.1	SU			12/04/19 08:05	1
Specific Conductance	130		1.0	1.0	umhos/cm			12/04/19 08:05	1
Total Dissolved Solids	130		10	10	mg/L			12/05/19 11:11	1
Oxidation Reduction Potential	260		10	10	millivolts			12/04/19 08:05	1

Client Sample ID: FAB - PH 7.0

Lab Sample ID: 180-98599-8

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

Method: EPA 9056A - Anions, Ion Chromatography - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.8		1.0	0.32	mg/L			12/08/19 19:05	1
Fluoride	0.22		0.10	0.026	mg/L			12/08/19 19:05	1
Sulfate	5.3		1.0	0.38	mg/L			12/08/19 19:05	1

Method: EPA 6020A - Metals (ICP/MS) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	96		80	39	ug/L		11/22/19 20:22	12/04/19 18:38	1
Calcium	91000		500	130	ug/L		11/22/19 20:22	12/04/19 18:38	1

General Chemistry - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.4		0.1	0.1	SU			11/22/19 09:15	1
Specific Conductance	630		1.0	1.0	umhos/cm			11/22/19 09:15	1
Total Dissolved Solids	540		10	10	mg/L			11/26/19 11:21	1
Oxidation Reduction Potential	260		10	10	millivolts			11/22/19 09:15	1

Client Sample ID: FAB - PH 5.5

Lab Sample ID: 180-98599-9

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

Method: EPA 9056A - Anions, Ion Chromatography - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.3	J	10	3.2	mg/L			12/08/19 22:48	10
Fluoride	0.30	J	1.0	0.26	mg/L			12/08/19 22:48	10
Sulfate	11		10	3.8	mg/L			12/08/19 22:48	10

Method: EPA 6020A - Metals (ICP/MS) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	140		80	39	ug/L		11/27/19 19:49	12/01/19 20:03	1
Calcium	1000000		500	130	ug/L		11/27/19 19:49	12/01/19 20:03	1

General Chemistry - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.4		0.1	0.1	SU			11/27/19 08:00	1
Specific Conductance	6400		1.0	1.0	umhos/cm			11/27/19 08:00	1
Total Dissolved Solids	4200		40	40	mg/L			11/29/19 11:17	1
Oxidation Reduction Potential	280		10	10	millivolts			11/27/19 08:00	1

Client Sample ID: FAB - PH 4.0

Lab Sample ID: 180-98599-10

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

Method: EPA 9056A - Anions, Ion Chromatography - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16	J	50	16	mg/L			12/08/19 23:33	50
Fluoride	1.8	J	5.0	1.3	mg/L			12/08/19 23:33	50
Sulfate	33	J	50	19	mg/L			12/08/19 23:33	50

Method: EPA 6020A - Metals (ICP/MS) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	210		80	39	ug/L		11/27/19 19:49	12/01/19 20:08	1
Calcium	3000000		5000	1300	ug/L		11/27/19 19:49	12/03/19 19:46	10

Client Sample ID: FAB - PH 4.0

Lab Sample ID: 180-98599-10

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

General Chemistry - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	4.2		0.1	0.1	SU			11/27/19 08:00	1
Specific Conductance	21000		1.0	1.0	umhos/cm			11/27/19 08:00	1
Total Dissolved Solids	15000		200	200	mg/L			11/29/19 11:17	1
Oxidation Reduction Potential	210		10	10	millivolts			11/27/19 08:00	1

Client Sample ID: FAB - PH 2.0

Lab Sample ID: 180-98599-11

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

Method: EPA 9056A - Anions, Ion Chromatography - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17	J	50	16	mg/L			12/08/19 23:48	50
Fluoride	4.7	J	5.0	1.3	mg/L			12/08/19 23:48	50
Sulfate	28	J	50	19	mg/L			12/08/19 23:48	50

Method: EPA 6020A - Metals (ICP/MS) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	500		80	39	ug/L		11/27/19 19:49	12/01/19 20:13	1
Calcium	3500000		5000	1300	ug/L		11/27/19 19:49	12/03/19 19:48	10

General Chemistry - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	2.0		0.1	0.1	SU			11/27/19 08:00	1
Specific Conductance	28000		1.0	1.0	umhos/cm			11/27/19 08:00	1
Total Dissolved Solids	20000		200	200	mg/L			11/29/19 11:17	1
Oxidation Reduction Potential	490		10	10	millivolts			11/27/19 08:00	1

Client Sample ID: FAB - NATURAL

Lab Sample ID: 180-98599-12

Date Collected: 11/11/19 11:45

Matrix: Solid

Date Received: 11/12/19 11:15

Method: EPA 9056A - Anions, Ion Chromatography - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.0		1.0	0.32	mg/L			12/08/19 18:35	1
Fluoride	0.35		0.10	0.026	mg/L			12/08/19 18:35	1
Sulfate	4.9		1.0	0.38	mg/L			12/08/19 18:35	1

Method: EPA 6020A - Metals (ICP/MS) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	93		80	39	ug/L		11/22/19 20:22	12/04/19 18:43	1
Calcium	17000		500	130	ug/L		11/22/19 20:22	12/04/19 18:43	1

General Chemistry - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.5		0.1	0.1	SU			11/22/19 09:15	1
Specific Conductance	130		1.0	1.0	umhos/cm			11/22/19 09:15	1
Total Dissolved Solids	150		10	10	mg/L			11/26/19 11:21	1
Oxidation Reduction Potential	230		10	10	millivolts			11/22/19 09:15	1

Client Sample ID: BLANK LOW

Lab Sample ID: 180-98599-13

Date Collected: 11/11/19 00:00

Matrix: Solid

Date Received: 11/12/19 11:15

Method: EPA 9056A - Anions, Ion Chromatography - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		25	8.0	mg/L			12/08/19 19:49	25
Chloride	ND		100	32	mg/L			12/09/19 00:03	100
Fluoride	ND		2.5	0.66	mg/L			12/08/19 19:49	25
Fluoride	ND		10	2.6	mg/L			12/09/19 00:03	100
Sulfate	ND		25	9.5	mg/L			12/08/19 19:49	25
Sulfate	ND		100	38	mg/L			12/09/19 00:03	100

Method: EPA 6020A - Metals (ICP/MS) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		80	39	ug/L		11/27/19 19:49	12/01/19 20:18	1
Boron	ND		80	39	ug/L		11/22/19 20:22	12/04/19 18:31	1
Calcium	**1100**		500	130	ug/L		11/27/19 19:49	12/03/19 19:43	1
Calcium	**210**	**J**	500	130	ug/L		11/22/19 20:22	12/04/19 18:31	1

General Chemistry - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**1.7**		0.1	0.1	SU			11/22/19 09:15	1
pH	**0.6**		0.1	0.1	SU			11/27/19 08:00	1
Specific Conductance	**11000**		1.0	1.0	umhos/cm			11/22/19 09:15	1
Specific Conductance	**110000**		1.0	1.0	umhos/cm			11/27/19 08:00	1
Total Dissolved Solids	**450**		67	67	mg/L			11/26/19 11:21	1
Total Dissolved Solids	**4400**		1000	1000	mg/L			11/29/19 11:17	1
Oxidation Reduction Potential	**580**		10	10	millivolts			11/22/19 09:15	1
Oxidation Reduction Potential	**580**		10	10	millivolts			11/27/19 08:00	1

Client Sample ID: BLANK MEDIUM

Lab Sample ID: 180-98599-14

Date Collected: 11/11/19 00:00

Matrix: Solid

Date Received: 11/12/19 11:15

Method: EPA 9056A - Anions, Ion Chromatography - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.32	mg/L			12/08/19 18:50	1
Fluoride	ND		0.10	0.026	mg/L			12/08/19 18:50	1
Sulfate	ND		1.0	0.38	mg/L			12/08/19 18:50	1

Method: EPA 6020A - Metals (ICP/MS) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		80	39	ug/L		11/22/19 20:22	12/04/19 18:41	1
Calcium	**240**	**J**	500	130	ug/L		11/22/19 20:22	12/04/19 18:41	1

General Chemistry - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.4**		0.1	0.1	SU			11/22/19 09:15	1
Specific Conductance	ND		1.0	1.0	umhos/cm			11/22/19 09:15	1
Total Dissolved Solids	ND		10	10	mg/L			11/26/19 11:21	1
Oxidation Reduction Potential	**520**		10	10	millivolts			11/22/19 09:15	1

Client: KPRG and Associates, Inc.
Project/Site: Midwest Generation

Job ID: 180-98599-1

Client Sample ID: BLANK HIGH

Date Collected: 11/11/19 00:00
Date Received: 11/12/19 11:15

Lab Sample ID: 180-98599-15

Matrix: Solid

Method: EPA 9056A - Anions, Ion Chromatography - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		50	16	mg/L			12/08/19 20:34	50
Chloride	ND		5.0	1.6	mg/L			12/08/19 22:33	5
Chloride	ND		1.0	0.32	mg/L			12/09/19 01:32	1
Fluoride	ND		5.0	1.3	mg/L			12/08/19 20:34	50
Fluoride	ND		0.50	0.13	mg/L			12/08/19 22:33	5
Fluoride	ND		0.10	0.026	mg/L			12/09/19 01:32	1
Sulfate	ND		50	19	mg/L			12/08/19 20:34	50
Sulfate	ND		5.0	1.9	mg/L			12/08/19 22:33	5
Sulfate	ND		1.0	0.38	mg/L			12/09/19 01:32	1

Method: EPA 6020A - Metals (ICP/MS) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		80	39	ug/L		11/27/19 19:49	12/01/19 19:19	1
Boron	**41**	**J**	80	39	ug/L		11/22/19 20:22	12/04/19 18:14	1
Boron	ND		80	39	ug/L		12/04/19 20:40	12/07/19 16:25	1
Calcium	**180**	**J**	500	130	ug/L		11/27/19 19:49	12/01/19 19:19	1
Calcium	**190**	**J**	500	130	ug/L		11/22/19 20:22	12/04/19 18:14	1
Calcium	ND		500	130	ug/L		12/04/19 20:40	12/07/19 16:25	1

General Chemistry - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**13.0**		0.1	0.1	SU			11/22/19 09:15	1
pH	**12.0**		0.1	0.1	SU			11/27/19 08:00	1
pH	**10.7**		0.1	0.1	SU			12/04/19 08:05	1
Specific Conductance	**41000**		1.0	1.0	umhos/cm			11/22/19 09:15	1
Specific Conductance	**2300**		1.0	1.0	umhos/cm			11/27/19 08:00	1
Specific Conductance	**97**		1.0	1.0	umhos/cm			12/04/19 08:05	1
Total Dissolved Solids	**13000**		500	500	mg/L			11/26/19 11:21	1
Total Dissolved Solids	**490**		20	20	mg/L			11/29/19 11:17	1
Total Dissolved Solids	ND		10	10	mg/L			12/05/19 11:11	1
Oxidation Reduction Potential	**50**		10	10	millivolts			11/22/19 09:15	1
Oxidation Reduction Potential	**90**		10	10	millivolts			11/27/19 08:00	1
Oxidation Reduction Potential	**580**		10	10	millivolts			12/04/19 08:05	1

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-300719/36
Matrix: Solid
Analysis Batch: 300719

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.32	mg/L			12/08/19 22:04	1
Fluoride	ND		0.10	0.026	mg/L			12/08/19 22:04	1
Sulfate	ND		1.0	0.38	mg/L			12/08/19 22:04	1

Lab Sample ID: MB 180-300719/6
Matrix: Solid
Analysis Batch: 300719

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.32	mg/L			12/08/19 13:38	1
Fluoride	ND		0.10	0.026	mg/L			12/08/19 13:38	1

Lab Sample ID: LCS 180-300719/35
Matrix: Solid
Analysis Batch: 300719

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	24.5		mg/L		98	80 - 120
Fluoride	1.25	1.24		mg/L		100	80 - 120
Sulfate	25.0	22.4		mg/L		90	80 - 120

Lab Sample ID: LCS 180-300719/5
Matrix: Solid
Analysis Batch: 300719

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	24.0		mg/L		96	80 - 120
Fluoride	1.25	1.16		mg/L		93	80 - 120
Sulfate	25.0	22.3		mg/L		89	80 - 120

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

Lab Sample ID: MB 180-299237/1-A
Matrix: Solid
Analysis Batch: 300413

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 299237

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		80	39	ug/L		11/22/19 20:22	12/04/19 18:09	1
Calcium	ND		500	130	ug/L		11/22/19 20:22	12/04/19 18:09	1

Lab Sample ID: LCS 180-299237/2-A
Matrix: Solid
Analysis Batch: 300413

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 299237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1250	1310		ug/L		105	80 - 120
Calcium	25000	27700		ug/L		111	80 - 120

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

Lab Sample ID: MB 180-299776/1-A
Matrix: Solid
Analysis Batch: 300051

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 299776

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		80	39	ug/L		11/27/19 19:49	12/01/19 19:09	1
Calcium	ND		500	130	ug/L		11/27/19 19:49	12/01/19 19:09	1

Lab Sample ID: LCS 180-299776/2-A
Matrix: Solid
Analysis Batch: 300051

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 299776

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1250	1170		ug/L		93	80 - 120
Calcium	25000	26100		ug/L		104	80 - 120

Lab Sample ID: MB 180-300352/1-A
Matrix: Solid
Analysis Batch: 300721

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300352

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		80	39	ug/L		12/04/19 20:40	12/07/19 15:42	1
Calcium	ND		500	130	ug/L		12/04/19 20:40	12/07/19 15:42	1

Lab Sample ID: LCS 180-300352/2-A
Matrix: Solid
Analysis Batch: 300721

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300352

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1250	1080		ug/L		86	80 - 120
Calcium	25000	26300		ug/L		105	80 - 120

Lab Sample ID: 180-98599-15 MS
Matrix: Solid
Analysis Batch: 300413

Client Sample ID: BLANK HIGH
Prep Type: Leach
Prep Batch: 299237

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	41	J	1250	1390		ug/L		108	75 - 125
Calcium	190	J	25000	27900		ug/L		111	75 - 125

Lab Sample ID: 180-98599-15 MSD
Matrix: Solid
Analysis Batch: 300413

Client Sample ID: BLANK HIGH
Prep Type: Leach
Prep Batch: 299237

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	41	J	1250	1400		ug/L		109	75 - 125	1	20
Calcium	190	J	25000	28600		ug/L		114	75 - 125	3	20

Lab Sample ID: 180-98599-15 MS
Matrix: Solid
Analysis Batch: 300051

Client Sample ID: BLANK HIGH
Prep Type: Leach
Prep Batch: 299776

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	ND		1250	1120		ug/L		89	75 - 125
Calcium	180	J	25000	25600		ug/L		102	75 - 125

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

Lab Sample ID: 180-98599-15 MSD
Matrix: Solid
Analysis Batch: 300051

Client Sample ID: BLANK HIGH
Prep Type: Leach
Prep Batch: 299776

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	ND		1250	1110		ug/L		89	75 - 125	0	20
Calcium	180	J	25000	25700		ug/L		102	75 - 125	1	20

Lab Sample ID: 180-98599-15 MS
Matrix: Solid
Analysis Batch: 300721

Client Sample ID: BLANK HIGH
Prep Type: Leach
Prep Batch: 300352

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	ND		1250	1090		ug/L		88	75 - 125
Calcium	ND		25000	26300		ug/L		105	75 - 125

Lab Sample ID: 180-98599-15 MSD
Matrix: Solid
Analysis Batch: 300721

Client Sample ID: BLANK HIGH
Prep Type: Leach
Prep Batch: 300352

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	ND		1250	1100		ug/L		88	75 - 125	1	20
Calcium	ND		25000	26100		ug/L		105	75 - 125	1	20

Method: 2540G - SM 2540G

Lab Sample ID: 180-98599-1 DU
Matrix: Solid
Analysis Batch: 298745

Client Sample ID: FAB
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	1		0.9		%		5	10
Percent Solids	99.0		99.1		%		0.05	10

Method: EPA 9040C - pH

Lab Sample ID: LCS 180-299215/1
Matrix: Solid
Analysis Batch: 299215

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.0		SU		100	99 - 101

Lab Sample ID: LCS 180-299736/1
Matrix: Solid
Analysis Batch: 299736

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.0		SU		100	99 - 101

Method: EPA 9040C - pH (Continued)

Lab Sample ID: LCS 180-300493/1
Matrix: Solid
Analysis Batch: 300493

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH			7.00	7.0		SU		100	99 - 101		

Lab Sample ID: 180-98599-12 DU
Matrix: Solid
Analysis Batch: 299215

Client Sample ID: FAB - NATURAL
Prep Type: Leach

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	8.5			8.5		SU				0	2

Lab Sample ID: 180-98599-15 DU
Matrix: Solid
Analysis Batch: 299215

Client Sample ID: BLANK HIGH
Prep Type: Leach

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	13.0			13.0		SU				0.2	2

Lab Sample ID: 180-98599-5 DU
Matrix: Solid
Analysis Batch: 299736

Client Sample ID: FAB - PH 10.5
Prep Type: Leach

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	10.2			10.2		SU				0.1	2

Lab Sample ID: 180-98599-13 DU
Matrix: Solid
Analysis Batch: 299736

Client Sample ID: BLANK LOW
Prep Type: Leach

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	0.6			0.6		SU				2	2

Lab Sample ID: 180-98599-6 DU
Matrix: Solid
Analysis Batch: 300493

Client Sample ID: FAB - PH 9.0
Prep Type: Leach

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	8.8			8.8		SU				0.1	2

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 180-299219/2
Matrix: Solid
Analysis Batch: 299219

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			11/22/19 09:15	1

Method: SM 2510B - Conductivity, Specific Conductance (Continued)

Lab Sample ID: LCS 180-299219/1
Matrix: Solid
Analysis Batch: 299219

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	84.0	85.2		umhos/cm		101	90 - 110

Lab Sample ID: MB 180-299741/2
Matrix: Solid
Analysis Batch: 299741

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			11/27/19 08:00	1

Lab Sample ID: LCS 180-299741/1
Matrix: Solid
Analysis Batch: 299741

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	84.0	84.7		umhos/cm		101	90 - 110

Lab Sample ID: MB 180-300495/2
Matrix: Solid
Analysis Batch: 300495

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			12/04/19 08:05	1

Lab Sample ID: LCS 180-300495/1
Matrix: Solid
Analysis Batch: 300495

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	84.0	84.8		umhos/cm		101	90 - 110

Lab Sample ID: 180-98599-12 DU
Matrix: Solid
Analysis Batch: 299219

Client Sample ID: FAB - NATURAL
Prep Type: Leach

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	130		135		umhos/cm		0.6	20

Lab Sample ID: 180-98599-15 DU
Matrix: Solid
Analysis Batch: 299219

Client Sample ID: BLANK HIGH
Prep Type: Leach

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	41000		40900		umhos/cm		0	20

Lab Sample ID: 180-98599-5 DU
Matrix: Solid
Analysis Batch: 299741

Client Sample ID: FAB - PH 10.5
Prep Type: Leach

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	200		196		umhos/cm		0.3	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: 180-98599-13 DU
Matrix: Solid
Analysis Batch: 299741

Client Sample ID: BLANK LOW
Prep Type: Leach

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	110000		112000		umhos/cm		0.09	20

Lab Sample ID: 180-98599-6 DU
Matrix: Solid
Analysis Batch: 300495

Client Sample ID: FAB - PH 9.0
Prep Type: Leach

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	130		128		umhos/cm		0.5	20

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

Lab Sample ID: MB 180-299523/2
Matrix: Solid
Analysis Batch: 299523

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	ND		10	10	mg/L			11/26/19 11:21	1

Lab Sample ID: LCS 180-299523/1
Matrix: Solid
Analysis Batch: 299523

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	188	194		mg/L		103	80 - 120

Lab Sample ID: MB 180-299835/2
Matrix: Solid
Analysis Batch: 299835

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	ND		10	10	mg/L			11/29/19 11:17	1

Lab Sample ID: LCS 180-299835/1
Matrix: Solid
Analysis Batch: 299835

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	188	164		mg/L		87	80 - 120

Lab Sample ID: MB 180-300445/2
Matrix: Solid
Analysis Batch: 300445

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	ND		10	10	mg/L			12/05/19 11:11	1

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

Lab Sample ID: LCS 180-300445/1
Matrix: Solid
Analysis Batch: 300445

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	188	166		mg/L		88	80 - 120

Method: SM 2580B - Reduction-Oxidation (REDOX) Potential

Lab Sample ID: LCS 180-299218/1
Matrix: Solid
Analysis Batch: 299218

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oxidation Reduction Potential	475	464		millivolts		98	90 - 110

Lab Sample ID: LCS 180-299738/1
Matrix: Solid
Analysis Batch: 299738

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oxidation Reduction Potential	475	459		millivolts		97	90 - 110

Lab Sample ID: LCS 180-300494/1
Matrix: Solid
Analysis Batch: 300494

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oxidation Reduction Potential	475	464		millivolts		98	90 - 110

Lab Sample ID: 180-98599-12 DU
Matrix: Solid
Analysis Batch: 299218

Client Sample ID: FAB - NATURAL
Prep Type: Leach

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Oxidation Reduction Potential	230		228		millivolts		0.9	20

Lab Sample ID: 180-98599-15 DU
Matrix: Solid
Analysis Batch: 299218

Client Sample ID: BLANK HIGH
Prep Type: Leach

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Oxidation Reduction Potential	50		49.0		millivolts		2	20

Lab Sample ID: 180-98599-5 DU
Matrix: Solid
Analysis Batch: 299738

Client Sample ID: FAB - PH 10.5
Prep Type: Leach

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Oxidation Reduction Potential	150		148		millivolts		1	20

Method: SM 2580B - Reduction-Oxidation (REDOX) Potential (Continued)

Lab Sample ID: 180-98599-13 DU
Matrix: Solid
Analysis Batch: 299738

Client Sample ID: BLANK LOW
Prep Type: Leach

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Oxidation Reduction Potential	580			586		millivolts				0.5	20

Lab Sample ID: 180-98599-6 DU
Matrix: Solid
Analysis Batch: 300494

Client Sample ID: FAB - PH 9.0
Prep Type: Leach

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Oxidation Reduction Potential	260			250		millivolts				2	20

HPLC/IC

Leach Batch: 299157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-3	FAB - PH 13.0	Leach	Solid	1313	
180-98599-4	FAB - PH 12.0	Leach	Solid	1313	
180-98599-8	FAB - PH 7.0	Leach	Solid	1313	
180-98599-12	FAB - NATURAL	Leach	Solid	1313	
180-98599-13	BLANK LOW	Leach	Solid	1313	
180-98599-14	BLANK MEDIUM	Leach	Solid	1313	
180-98599-15	BLANK HIGH	Leach	Solid	1313	

Leach Batch: 299658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-5	FAB - PH 10.5	Leach	Solid	1313	
180-98599-9	FAB - PH 5.5	Leach	Solid	1313	
180-98599-10	FAB - PH 4.0	Leach	Solid	1313	
180-98599-11	FAB - PH 2.0	Leach	Solid	1313	
180-98599-13	BLANK LOW	Leach	Solid	1313	
180-98599-15	BLANK HIGH	Leach	Solid	1313	

Leach Batch: 300270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-6	FAB - PH 9.0	Leach	Solid	1313	
180-98599-15	BLANK HIGH	Leach	Solid	1313	

Analysis Batch: 300719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-3	FAB - PH 13.0	Leach	Solid	EPA 9056A	299157
180-98599-4	FAB - PH 12.0	Leach	Solid	EPA 9056A	299157
180-98599-5	FAB - PH 10.5	Leach	Solid	EPA 9056A	299658
180-98599-6	FAB - PH 9.0	Leach	Solid	EPA 9056A	300270
180-98599-8	FAB - PH 7.0	Leach	Solid	EPA 9056A	299157
180-98599-9	FAB - PH 5.5	Leach	Solid	EPA 9056A	299658
180-98599-10	FAB - PH 4.0	Leach	Solid	EPA 9056A	299658
180-98599-11	FAB - PH 2.0	Leach	Solid	EPA 9056A	299658
180-98599-12	FAB - NATURAL	Leach	Solid	EPA 9056A	299157
180-98599-13	BLANK LOW	Leach	Solid	EPA 9056A	299157
180-98599-13	BLANK LOW	Leach	Solid	EPA 9056A	299658
180-98599-14	BLANK MEDIUM	Leach	Solid	EPA 9056A	299157
180-98599-15	BLANK HIGH	Leach	Solid	EPA 9056A	299157
180-98599-15	BLANK HIGH	Leach	Solid	EPA 9056A	299658
180-98599-15	BLANK HIGH	Leach	Solid	EPA 9056A	300270
MB 180-300719/36	Method Blank	Total/NA	Solid	EPA 9056A	
MB 180-300719/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-300719/35	Lab Control Sample	Total/NA	Solid	EPA 9056A	
LCS 180-300719/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Metals

Leach Batch: 299157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-3	FAB - PH 13.0	Leach	Solid	1313	
180-98599-4	FAB - PH 12.0	Leach	Solid	1313	
180-98599-8	FAB - PH 7.0	Leach	Solid	1313	

Metals (Continued)

Leach Batch: 299157 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-12	FAB - NATURAL	Leach	Solid	1313	
180-98599-13	BLANK LOW	Leach	Solid	1313	
180-98599-14	BLANK MEDIUM	Leach	Solid	1313	
180-98599-15	BLANK HIGH	Leach	Solid	1313	
180-98599-15 MS	BLANK HIGH	Leach	Solid	1313	
180-98599-15 MSD	BLANK HIGH	Leach	Solid	1313	

Prep Batch: 299237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-3	FAB - PH 13.0	Leach	Solid	3010A	299157
180-98599-4	FAB - PH 12.0	Leach	Solid	3010A	299157
180-98599-8	FAB - PH 7.0	Leach	Solid	3010A	299157
180-98599-12	FAB - NATURAL	Leach	Solid	3010A	299157
180-98599-13	BLANK LOW	Leach	Solid	3010A	299157
180-98599-14	BLANK MEDIUM	Leach	Solid	3010A	299157
180-98599-15	BLANK HIGH	Leach	Solid	3010A	299157
MB 180-299237/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-299237/2-A	Lab Control Sample	Total/NA	Solid	3010A	
180-98599-15 MS	BLANK HIGH	Leach	Solid	3010A	299157
180-98599-15 MSD	BLANK HIGH	Leach	Solid	3010A	299157

Leach Batch: 299658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-5	FAB - PH 10.5	Leach	Solid	1313	
180-98599-9	FAB - PH 5.5	Leach	Solid	1313	
180-98599-10	FAB - PH 4.0	Leach	Solid	1313	
180-98599-11	FAB - PH 2.0	Leach	Solid	1313	
180-98599-13	BLANK LOW	Leach	Solid	1313	
180-98599-15	BLANK HIGH	Leach	Solid	1313	
180-98599-15 MS	BLANK HIGH	Leach	Solid	1313	
180-98599-15 MSD	BLANK HIGH	Leach	Solid	1313	

Prep Batch: 299776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-5	FAB - PH 10.5	Leach	Solid	3010A	299658
180-98599-9	FAB - PH 5.5	Leach	Solid	3010A	299658
180-98599-10	FAB - PH 4.0	Leach	Solid	3010A	299658
180-98599-11	FAB - PH 2.0	Leach	Solid	3010A	299658
180-98599-13	BLANK LOW	Leach	Solid	3010A	299658
180-98599-15	BLANK HIGH	Leach	Solid	3010A	299658
MB 180-299776/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-299776/2-A	Lab Control Sample	Total/NA	Solid	3010A	
180-98599-15 MS	BLANK HIGH	Leach	Solid	3010A	299658
180-98599-15 MSD	BLANK HIGH	Leach	Solid	3010A	299658

Analysis Batch: 300051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-5	FAB - PH 10.5	Leach	Solid	EPA 6020A	299776
180-98599-9	FAB - PH 5.5	Leach	Solid	EPA 6020A	299776
180-98599-10	FAB - PH 4.0	Leach	Solid	EPA 6020A	299776
180-98599-11	FAB - PH 2.0	Leach	Solid	EPA 6020A	299776

Metals (Continued)

Analysis Batch: 300051 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-13	BLANK LOW	Leach	Solid	EPA 6020A	299776
180-98599-15	BLANK HIGH	Leach	Solid	EPA 6020A	299776
MB 180-299776/1-A	Method Blank	Total/NA	Solid	EPA 6020A	299776
LCS 180-299776/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	299776
180-98599-15 MS	BLANK HIGH	Leach	Solid	EPA 6020A	299776
180-98599-15 MSD	BLANK HIGH	Leach	Solid	EPA 6020A	299776

Leach Batch: 300270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-6	FAB - PH 9.0	Leach	Solid	1313	
180-98599-15	BLANK HIGH	Leach	Solid	1313	
180-98599-15 MS	BLANK HIGH	Leach	Solid	1313	
180-98599-15 MSD	BLANK HIGH	Leach	Solid	1313	

Analysis Batch: 300306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-10	FAB - PH 4.0	Leach	Solid	EPA 6020A	299776
180-98599-11	FAB - PH 2.0	Leach	Solid	EPA 6020A	299776
180-98599-13	BLANK LOW	Leach	Solid	EPA 6020A	299776

Prep Batch: 300352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-6	FAB - PH 9.0	Leach	Solid	3010A	300270
180-98599-15	BLANK HIGH	Leach	Solid	3010A	300270
MB 180-300352/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-300352/2-A	Lab Control Sample	Total/NA	Solid	3010A	
180-98599-15 MS	BLANK HIGH	Leach	Solid	3010A	300270
180-98599-15 MSD	BLANK HIGH	Leach	Solid	3010A	300270

Analysis Batch: 300413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-3	FAB - PH 13.0	Leach	Solid	EPA 6020A	299237
180-98599-4	FAB - PH 12.0	Leach	Solid	EPA 6020A	299237
180-98599-8	FAB - PH 7.0	Leach	Solid	EPA 6020A	299237
180-98599-12	FAB - NATURAL	Leach	Solid	EPA 6020A	299237
180-98599-13	BLANK LOW	Leach	Solid	EPA 6020A	299237
180-98599-14	BLANK MEDIUM	Leach	Solid	EPA 6020A	299237
180-98599-15	BLANK HIGH	Leach	Solid	EPA 6020A	299237
MB 180-299237/1-A	Method Blank	Total/NA	Solid	EPA 6020A	299237
LCS 180-299237/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	299237
180-98599-15 MS	BLANK HIGH	Leach	Solid	EPA 6020A	299237
180-98599-15 MSD	BLANK HIGH	Leach	Solid	EPA 6020A	299237

Analysis Batch: 300721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-6	FAB - PH 9.0	Leach	Solid	EPA 6020A	300352
180-98599-15	BLANK HIGH	Leach	Solid	EPA 6020A	300352
MB 180-300352/1-A	Method Blank	Total/NA	Solid	EPA 6020A	300352
LCS 180-300352/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	300352
180-98599-15 MS	BLANK HIGH	Leach	Solid	EPA 6020A	300352
180-98599-15 MSD	BLANK HIGH	Leach	Solid	EPA 6020A	300352

General Chemistry

Analysis Batch: 298745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-1	FAB	Total/NA	Solid	2540G	
180-98599-1 DU	FAB	Total/NA	Solid	2540G	

Leach Batch: 299157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-2	FAB - PRETEST	Leach	Solid	1313	
180-98599-2	FAB - PRETEST	Leach	Solid	1313	
180-98599-2	FAB - PRETEST	Leach	Solid	1313	
180-98599-3	FAB - PH 13.0	Leach	Solid	1313	
180-98599-4	FAB - PH 12.0	Leach	Solid	1313	
180-98599-8	FAB - PH 7.0	Leach	Solid	1313	
180-98599-12	FAB - NATURAL	Leach	Solid	1313	
180-98599-13	BLANK LOW	Leach	Solid	1313	
180-98599-14	BLANK MEDIUM	Leach	Solid	1313	
180-98599-15	BLANK HIGH	Leach	Solid	1313	
180-98599-12 DU	FAB - NATURAL	Leach	Solid	1313	
180-98599-15 DU	BLANK HIGH	Leach	Solid	1313	

Analysis Batch: 299215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-2	FAB - PRETEST	Leach	Solid	EPA 9040C	299157
180-98599-2	FAB - PRETEST	Leach	Solid	EPA 9040C	299157
180-98599-2	FAB - PRETEST	Leach	Solid	EPA 9040C	299157
180-98599-3	FAB - PH 13.0	Leach	Solid	EPA 9040C	299157
180-98599-4	FAB - PH 12.0	Leach	Solid	EPA 9040C	299157
180-98599-8	FAB - PH 7.0	Leach	Solid	EPA 9040C	299157
180-98599-12	FAB - NATURAL	Leach	Solid	EPA 9040C	299157
180-98599-13	BLANK LOW	Leach	Solid	EPA 9040C	299157
180-98599-14	BLANK MEDIUM	Leach	Solid	EPA 9040C	299157
180-98599-15	BLANK HIGH	Leach	Solid	EPA 9040C	299157
LCS 180-299215/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	
180-98599-12 DU	FAB - NATURAL	Leach	Solid	EPA 9040C	299157
180-98599-15 DU	BLANK HIGH	Leach	Solid	EPA 9040C	299157

Analysis Batch: 299218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-3	FAB - PH 13.0	Leach	Solid	SM 2580B	299157
180-98599-4	FAB - PH 12.0	Leach	Solid	SM 2580B	299157
180-98599-8	FAB - PH 7.0	Leach	Solid	SM 2580B	299157
180-98599-12	FAB - NATURAL	Leach	Solid	SM 2580B	299157
180-98599-13	BLANK LOW	Leach	Solid	SM 2580B	299157
180-98599-14	BLANK MEDIUM	Leach	Solid	SM 2580B	299157
180-98599-15	BLANK HIGH	Leach	Solid	SM 2580B	299157
LCS 180-299218/1	Lab Control Sample	Total/NA	Solid	SM 2580B	
180-98599-12 DU	FAB - NATURAL	Leach	Solid	SM 2580B	299157
180-98599-15 DU	BLANK HIGH	Leach	Solid	SM 2580B	299157

Analysis Batch: 299219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-3	FAB - PH 13.0	Leach	Solid	SM 2510B	299157
180-98599-4	FAB - PH 12.0	Leach	Solid	SM 2510B	299157

General Chemistry (Continued)

Analysis Batch: 299219 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-8	FAB - PH 7.0	Leach	Solid	SM 2510B	299157
180-98599-12	FAB - NATURAL	Leach	Solid	SM 2510B	299157
180-98599-13	BLANK LOW	Leach	Solid	SM 2510B	299157
180-98599-14	BLANK MEDIUM	Leach	Solid	SM 2510B	299157
180-98599-15	BLANK HIGH	Leach	Solid	SM 2510B	299157
MB 180-299219/2	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-299219/1	Lab Control Sample	Total/NA	Solid	SM 2510B	
180-98599-12 DU	FAB - NATURAL	Leach	Solid	SM 2510B	299157
180-98599-15 DU	BLANK HIGH	Leach	Solid	SM 2510B	299157

Analysis Batch: 299523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-3	FAB - PH 13.0	Leach	Solid	SM 2540C	299157
180-98599-4	FAB - PH 12.0	Leach	Solid	SM 2540C	299157
180-98599-8	FAB - PH 7.0	Leach	Solid	SM 2540C	299157
180-98599-12	FAB - NATURAL	Leach	Solid	SM 2540C	299157
180-98599-13	BLANK LOW	Leach	Solid	SM 2540C	299157
180-98599-14	BLANK MEDIUM	Leach	Solid	SM 2540C	299157
180-98599-15	BLANK HIGH	Leach	Solid	SM 2540C	299157
MB 180-299523/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-299523/1	Lab Control Sample	Total/NA	Solid	SM 2540C	

Leach Batch: 299658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-2	FAB - PRETEST	Leach	Solid	1313	
180-98599-2	FAB - PRETEST	Leach	Solid	1313	
180-98599-2	FAB - PRETEST	Leach	Solid	1313	
180-98599-2	FAB - PRETEST	Leach	Solid	1313	
180-98599-5	FAB - PH 10.5	Leach	Solid	1313	
180-98599-9	FAB - PH 5.5	Leach	Solid	1313	
180-98599-10	FAB - PH 4.0	Leach	Solid	1313	
180-98599-11	FAB - PH 2.0	Leach	Solid	1313	
180-98599-13	BLANK LOW	Leach	Solid	1313	
180-98599-15	BLANK HIGH	Leach	Solid	1313	
180-98599-5 DU	FAB - PH 10.5	Leach	Solid	1313	
180-98599-13 DU	BLANK LOW	Leach	Solid	1313	

Analysis Batch: 299736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-2	FAB - PRETEST	Leach	Solid	EPA 9040C	299658
180-98599-2	FAB - PRETEST	Leach	Solid	EPA 9040C	299658
180-98599-2	FAB - PRETEST	Leach	Solid	EPA 9040C	299658
180-98599-2	FAB - PRETEST	Leach	Solid	EPA 9040C	299658
180-98599-5	FAB - PH 10.5	Leach	Solid	EPA 9040C	299658
180-98599-9	FAB - PH 5.5	Leach	Solid	EPA 9040C	299658
180-98599-10	FAB - PH 4.0	Leach	Solid	EPA 9040C	299658
180-98599-11	FAB - PH 2.0	Leach	Solid	EPA 9040C	299658
180-98599-13	BLANK LOW	Leach	Solid	EPA 9040C	299658
180-98599-15	BLANK HIGH	Leach	Solid	EPA 9040C	299658
LCS 180-299736/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	
180-98599-5 DU	FAB - PH 10.5	Leach	Solid	EPA 9040C	299658

General Chemistry (Continued)

Analysis Batch: 299736 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-13 DU	BLANK LOW	Leach	Solid	EPA 9040C	299658

Analysis Batch: 299738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-5	FAB - PH 10.5	Leach	Solid	SM 2580B	299658
180-98599-9	FAB - PH 5.5	Leach	Solid	SM 2580B	299658
180-98599-10	FAB - PH 4.0	Leach	Solid	SM 2580B	299658
180-98599-11	FAB - PH 2.0	Leach	Solid	SM 2580B	299658
180-98599-13	BLANK LOW	Leach	Solid	SM 2580B	299658
180-98599-15	BLANK HIGH	Leach	Solid	SM 2580B	299658
LCS 180-299738/1	Lab Control Sample	Total/NA	Solid	SM 2580B	
180-98599-5 DU	FAB - PH 10.5	Leach	Solid	SM 2580B	299658
180-98599-13 DU	BLANK LOW	Leach	Solid	SM 2580B	299658

Analysis Batch: 299741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-5	FAB - PH 10.5	Leach	Solid	SM 2510B	299658
180-98599-9	FAB - PH 5.5	Leach	Solid	SM 2510B	299658
180-98599-10	FAB - PH 4.0	Leach	Solid	SM 2510B	299658
180-98599-11	FAB - PH 2.0	Leach	Solid	SM 2510B	299658
180-98599-13	BLANK LOW	Leach	Solid	SM 2510B	299658
180-98599-15	BLANK HIGH	Leach	Solid	SM 2510B	299658
MB 180-299741/2	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-299741/1	Lab Control Sample	Total/NA	Solid	SM 2510B	
180-98599-5 DU	FAB - PH 10.5	Leach	Solid	SM 2510B	299658
180-98599-13 DU	BLANK LOW	Leach	Solid	SM 2510B	299658

Analysis Batch: 299835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-5	FAB - PH 10.5	Leach	Solid	SM 2540C	299658
180-98599-9	FAB - PH 5.5	Leach	Solid	SM 2540C	299658
180-98599-10	FAB - PH 4.0	Leach	Solid	SM 2540C	299658
180-98599-11	FAB - PH 2.0	Leach	Solid	SM 2540C	299658
180-98599-13	BLANK LOW	Leach	Solid	SM 2540C	299658
180-98599-15	BLANK HIGH	Leach	Solid	SM 2540C	299658
MB 180-299835/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-299835/1	Lab Control Sample	Total/NA	Solid	SM 2540C	

Leach Batch: 300270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-6	FAB - PH 9.0	Leach	Solid	1313	
180-98599-15	BLANK HIGH	Leach	Solid	1313	
180-98599-6 DU	FAB - PH 9.0	Leach	Solid	1313	

Analysis Batch: 300445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-6	FAB - PH 9.0	Leach	Solid	SM 2540C	300270
180-98599-15	BLANK HIGH	Leach	Solid	SM 2540C	300270
MB 180-300445/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-300445/1	Lab Control Sample	Total/NA	Solid	SM 2540C	

QC Association Summary

Client: KPRG and Associates, Inc.
Project/Site: Midwest Generation

Job ID: 180-98599-1

General Chemistry

Analysis Batch: 300493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-6	FAB - PH 9.0	Leach	Solid	EPA 9040C	300270
180-98599-15	BLANK HIGH	Leach	Solid	EPA 9040C	300270
LCS 180-300493/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	
180-98599-6 DU	FAB - PH 9.0	Leach	Solid	EPA 9040C	300270

Analysis Batch: 300494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-6	FAB - PH 9.0	Leach	Solid	SM 2580B	300270
180-98599-15	BLANK HIGH	Leach	Solid	SM 2580B	300270
LCS 180-300494/1	Lab Control Sample	Total/NA	Solid	SM 2580B	
180-98599-6 DU	FAB - PH 9.0	Leach	Solid	SM 2580B	300270

Analysis Batch: 300495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-98599-6	FAB - PH 9.0	Leach	Solid	SM 2510B	300270
180-98599-15	BLANK HIGH	Leach	Solid	SM 2510B	300270
MB 180-300495/2	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-300495/1	Lab Control Sample	Total/NA	Solid	SM 2510B	
180-98599-6 DU	FAB - PH 9.0	Leach	Solid	SM 2510B	300270

Chain of Custody Record

381394

eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager:	Site Contact:	Date:	COC No:
Company Name: KPRG and Associates, Inc	Tel/Email:	Lab Contact:	Carrier:	1 of 1 COCs
Address: 14665 W. Lisbon Rd. Ste 1A	**Analysis Turnaround Time**			Sampler:
City/State/Zip: Brookfield/WI/53005	☐ CALENDAR DAYS ☐ WORKING DAYS			**For Lab Use Only:**
Phone: 262-781-0475	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Powerton FAB ASD	☐ 1 week			
Site: Powerton	☐ 2 days			Job / SDG No.:
PO# #23517	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	1313 Leaf	Sample Specific Notes:
FAB	11-11-19	1145	C	S	3	N	N	X	

180-98599 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

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.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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 & Comments:
App III Parameters → Boron, Calcium, Chloride, Fluoride, pH, TDS, Sulfate

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Mar Odr	KPRG	11-11-19/1430	FEDEX	11-11-19/1430 →	
Relinquished by:	Company:	Date/Time:	Received by: Bobby Waters	Company: TAP LH	Date/Time: 11-12-19
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 11:15

1175400
EXP 09/20
SHIP DATE: 11
ACTWGT: 47.90 LB
CAD: 6
DIMS: 23x12x13 IN
BILL THIRD PARTY
ORIGIN ID:PIAA
(000) 000-0000
14 PLAZA DR STE 106
WESTMONT, IL 60559
UNITED STATES US
TESTAMERICA PITTSBURGH
301 ALPHA DR. RIDC PARK
BLAWNOX PA 15238
(412) 963-7068
INV:
PO:
REF:
DEPT:
FedEx Express
TRK# 0201 7808 8992 9989
TUE - 12 NOV 3:00P
STANDARD OVERNIGHT
XH AGCA
15238
PIT
PA-US
Uncorrected temp
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18
180-98599 Waybill

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 180-98599-1

Login Number: 98599
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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.	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?	False	
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	